

Lizards of Rio Negro Province, northern Patagonia, Argentina

Cristian Hernan Fulvio Perez¹, Nicolas Frutos¹, Monica Kozykariski¹, Mariana Morando¹, Daniel Roberto Perez² and Luciano Javier Avila^{1*}

¹ CENPAT-CONICET. Boulevard Almirante Brown 2915, U9120ACD. Puerto Madryn, Chubut, Argentina.

² Universidad Nacional del Comahue, Escuela Superior de Salud y Ambiente. Buenos Aires 1400, 8300, Neuquén, Neuquén, Argentina.

* Corresponding author. E-mail: avila@cenpat.edu.ar

ABSTRACT: We provide a checklist of lizards distributed in the Rio Negro province, northern Patagonia, Argentina. Representatives of 45 species of lizards were found inhabiting this region as well as several still undescribed species. This list is a contribution to the still poorly known herpetofauna of the region.

INTRODUCTION

Knowledge of Argentinean lizards has grown exponentially in the last decade. In general the majority of the new information is concentrated around big cities with academic institutions or in areas with some particular interest, as an accessible mountain range, national park, or subject to survey for environmental studies related to some kind of human perturbation. Limited surveys carried out in the last years demonstrated that some regions without any special or attractive geographic formation could harbor very interesting fauna assemblages and frequently, new species (*e.g.* Etheridge 2001; Abdala 2002; 2003; Etheridge and Christie 2003; Morando *et al.* 2003; 2004; Avila *et al.* 2007; 2009; 2010). Regional survey studies are very important for several reasons: first they are the basic step to obtain general knowledge about fauna from specific areas. Second, they are important for subsequent systematic works in poorly known species; being especially relevant in countries like Argentina where the alpha systematic of some groups is scarcely known. Third, they are the ineludible fundamentals to do any kind of environmental, biogeographic, or conservation study. In northern Patagonia, Rio Negro Province harbors a very interesting mosaic of natural areas with large ecotones between the Patagonian Steppe, Austral Monte, and Espinal. Ecotonal areas are always of special interest in evolutionary biology because it is well known their speciation-prone characteristics (Schilthuizen 2000). Despite this, knowledge of the reptil fauna of Rio Negro province is limited to a very few works carried out several years ago mainly by J. M. Cei (see Cei 1986 for a revision). Posteriorly, a few notes about geographic distribution and ecological studies on the same species were added (Vega and Bellagamba 1994; Halloy *et al.* 1998; Cruz *et al.* 1999; Avila *et al.* 1999; 2000; 2001; 2002; 2003; 2004a; 2004b; 2006a; 2006b; 2006c; 2007; Acosta *et al.* 1996a; 1996b; Avila and D'Hervé 1999; Ibargüengoytia *et al.* 2001; Perez and Perez 2001; Avila 2002; Avila and

Morando 2002; Belver and Avila 2002; Ibargüengoytia 2004; Ibargüengoytia *et al.* 2005; Perez and Avila 2005; Perez *et al.* 2005; Yokes *et al.* 2006; Frutos *et al.* 2007; Ibargüengoytia and Casalins 2007; Morando *et al.* 2007; Ibargüengoytia *et al.* 2008; Perez *et al.* 2008; Nori *et al.* 2010a;b; Scrocchi *et al.* 2010), as well as descriptions of new species (Abdala 2003; 2005; Etheridge and Christie 2003; Lobo and Quinteros 2005a; 2005b; Scolaro and Ibargüengoytia 2007; Scolaro *et al.* 2008; Avila *et al.* 2010). General information is also found in some general public books as Scolaro *et al.* (2006) and Scrocchi *et al.* (2010). Here we present a checklist of the lizard fauna of the Río Negro Province in northern Patagonia, with emphasis in the non-Andean areas of Patagonian Steppe and Monte formations.

MATERIALS AND METHODS

Río Negro province, located in northern Patagonia between 37° and 42° S and 63° and 72° W encompasses about 203,013 km² (Anonymous 2008). It is bordered by the Argentine provinces of Chubut to the south, Neuquén to the west, La Pampa to the north, Buenos Aires to the northeast; Chile lies to the southwest and the Atlantic Ocean to the east (Figure 1).

The province has two distinct regions. The Andean region, limited to a narrow strip in the southwestern corner, with granite and metamorphic mountains typical of the southern Andes. The extra-Andean region, which comprises most of the province, in the west and south is characterized by volcanic terraces, plateaus, and tablelands from Tertiary and Quaternary volcanic events. The Somuncurá plateau is the largest of these areas with almost 15,000 km² between 900 to 1,500 m. In the northern part, valleys and low hills with thick sedimentary layers dominate the landscape. Two major rivers, Colorado and Negro dissect the northern area of the province forming two narrow valleys; the northwestern limit is the Limay River, its valley is almost completely destroyed by dam construction.

Climate is dry and cold in the majority of the territory with the exception of the southwestern corner. Western winds loose humidity in the Pacific coast and this determines a west-east aridity increased. In the southwestern corner of the province precipitation reaches 2,500 mm/yr but in the central and eastern areas the average precipitation is 200 mm/yr. The temperature range varies significantly

from -25,6°C (winter) in the south to 43.6°C in the north (summer). Four major phytogeographic provinces were defined by Cabrera (1971): Monte, Patagonia, Altoandina, and Subantártica, with very important ecotonal areas; but Bran *et al.* (2000) proposed seven ecological regions using climate, hidrography, soil, vegetation and landscape characteristics (Figure 2).

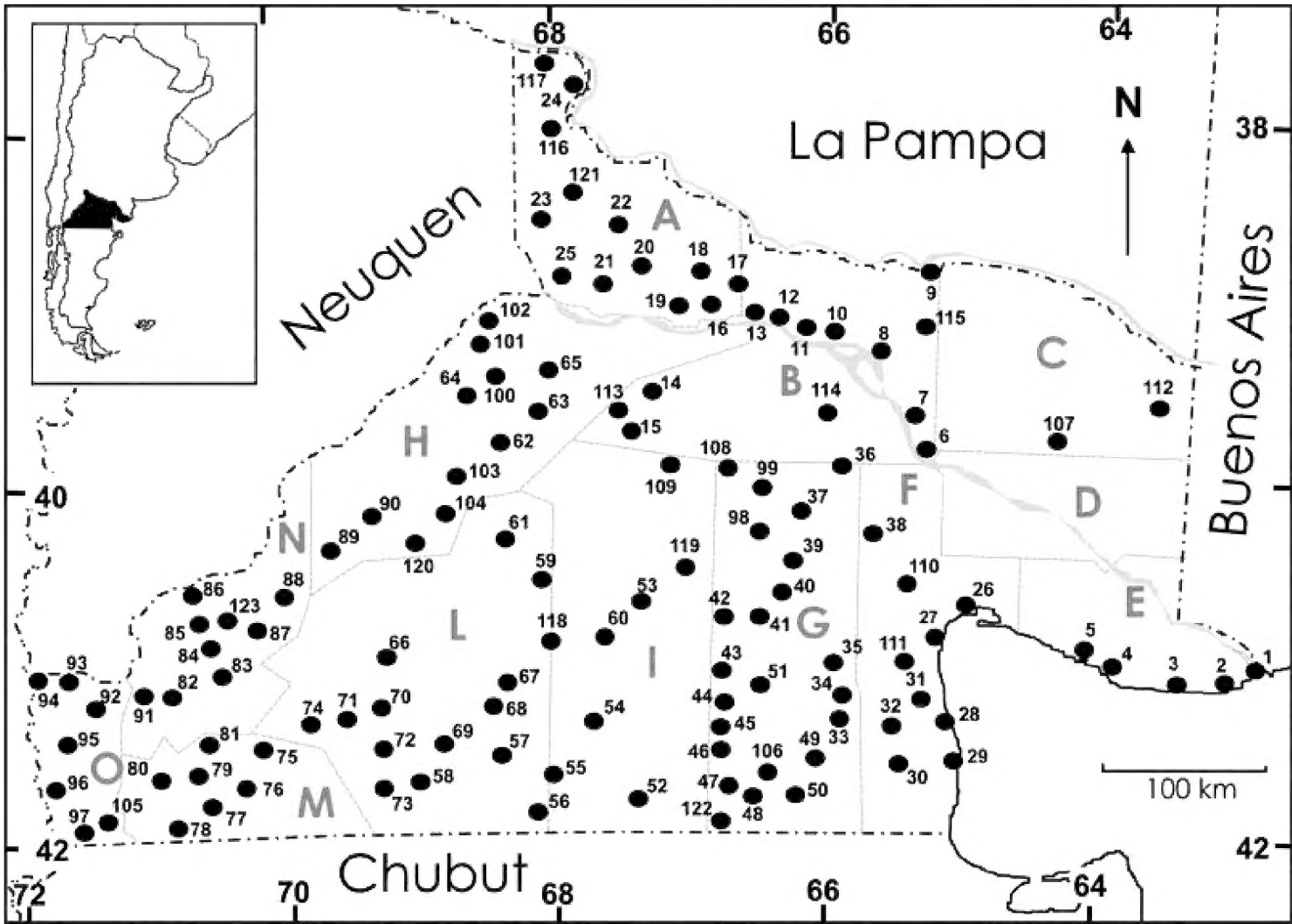


FIGURE 1. Map of Rio Negro provinces, Argentina showing marked points by Departament. Black dot: localities cited in this text. Department names: A General Roca, B Avellaneda, C Pichi Mahuida, D General Conesa, E Adolfo Alsina, F San Antonio, G Valcheta, H El Cuy, I 9 de Julio, L 25 de Mayo, M Ñorquinco, N Pilcaniyeu, O Bariloche.

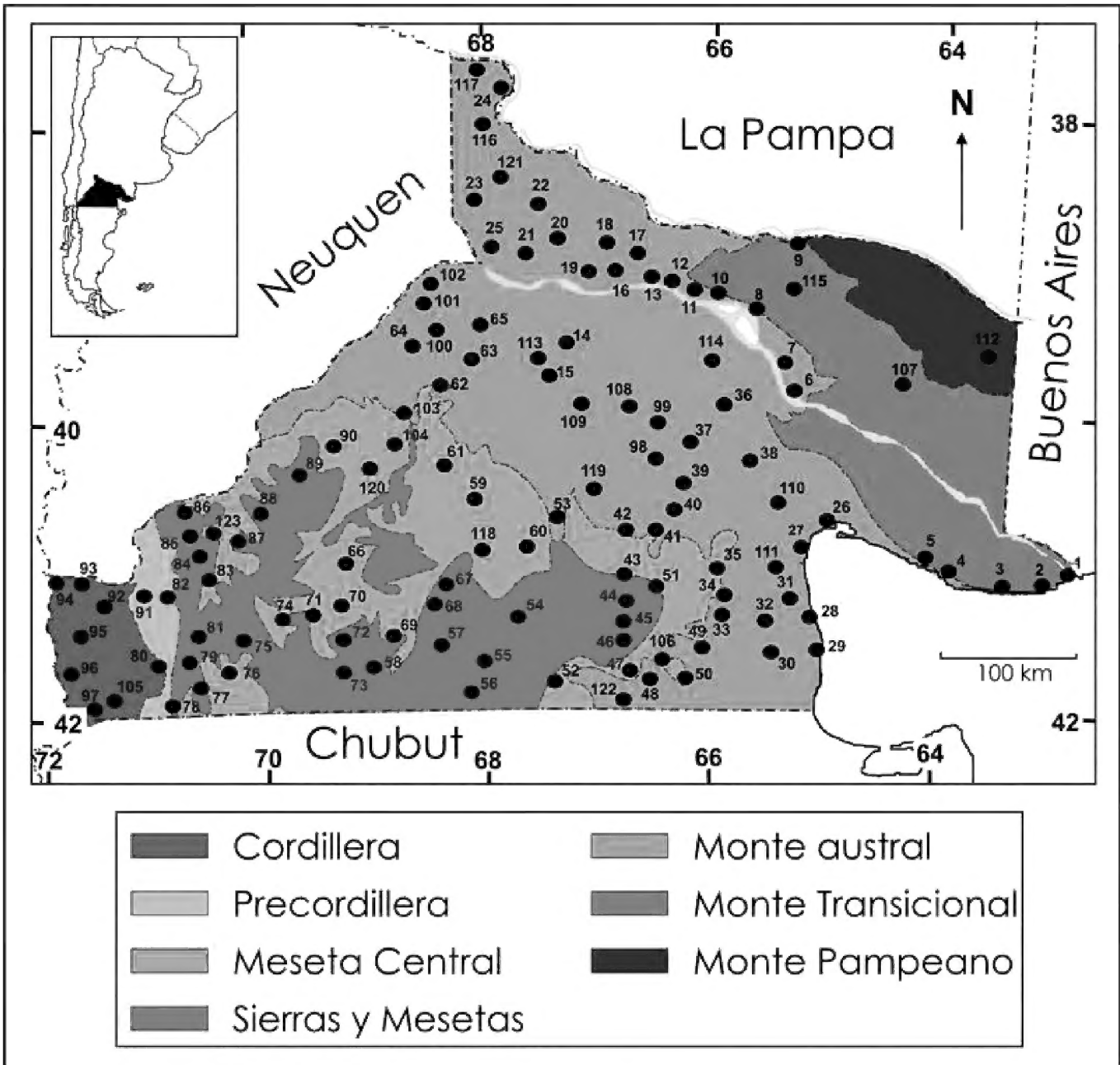


FIGURE 2. Map of Rio Negro provinces, Argentina showing marked points by ecological area. Refer to figure. Map taken from Bran *et al.* (2000).

Our research in Rio Negro province began in 1995 with one to three annual field trips by all or some of the authors; reaching the most representative regions of the eastern, western, southern, and northern parts of the province. Several regions, as the central area, remain almost unknown because of very difficult accessibility due to road absence or topographical characteristics. Trips were generally made while conducting more extensive expeditions to other areas of Patagonia; thus an intensive survey of Rio Negro province remains to be undertaken. Specimens were observed and usually collected around sampling points along roads or very close areas. At each sampling point, transects along representative habitats were made (each one between 1 to 3 km, usually between 8:30 to 20:00 hs, with an active search methodology (depending on season and climatic conditions). Lizards were collected by hand, noose, rubber band or fork, euthanized with pericardic injection of sodium penthotal, fixed in formalin 10-20 % and stored in ethanol 70 %. Specimens were deposited in the following museums or collections: Fundación Miguel Lillo, Tucumán, Argentina (FML); Monte L. Bean Museum, Brigham Young University, Provo, USA (BYU); Museo de La Plata, La Plata, Argentina (MLP), and the Centro Nacional Patagónico-CONICET, Puerto Madryn, Argentina (LJAMM-CNP). Herpetological collections of two major institutions were search and included in this study: Museo Nacional de Ciencias Naturales B. Rivadavia, Buenos Aires (by LJA) and Museum of Vertebrate Zoology, Berkeley (by LJA and MM). Sight records, additional material from other collections or literature records were used when lizard identification could be accurately determined.

RESULTS AND DISCUSSION

A total of 46 lizard species have been recorded in Rio Negro province (Figure 3 and 4) belonging to 10 genera and 5 families. Species are listed alphabetically within genera, and generic accounts are alphabetical by family. More than 2500 individuals from 233 collection sites were examined. In Table 1 and Figure 1 we pooled very close collection sites for a clearer graphic display (but they are separated in Appendix I). Table 2 and Figure 2 show species presence in an Ecological Areas classification according to Bran et al. (2000).

By far, *Liolaemus* is the genus with more species represented in the region with more than 50% of the species (24 species), followed by *Phymaturus* (10 species). Representatives of Leiosauridae are found mainly in rocky habitats of the central, south and western regions, but with low population density; only *L. bellii* and *P. fasciatus* are found in lowland habitats but they are very secretive and apparently with small population sizes. With the exception of *Cnemidophorus longicaudus*, all other Teiidae, as well as *Stenocercus* and *Homonota* (except *H. darwinii*) have marginal distributions and low population density in Rio Negro. Systematic studies currently in course will clarify the taxonomic situation of several species with very poor diagnostic characters.

CHECKLIST

Liolaemidae

Liolaemus

- Liolaemus bibronii* Bell, 1843
- Liolaemus boulengeri* Koslowsky, 1898
- Liolaemus casamiquelai* Avila, Pérez, Morando and Sites, 2010
- Liolaemus darwinii* Bell, 1843
- Liolaemus elongatus* Koslowsky, 1896
- Liolaemus goetschi* Müller and Hellmich, 1938
- Liolaemus gracilis* Bell, 1843
- Liolaemus grosseorum* Etheridge, 2001
- Liolaemus inacayali* Abdala, 2003
- Liolaemus kriegi* Müller and Hellmich, 1939
- Liolaemus lineomaculatus* Boulenger, 1885
- Liolaemus lobo*i Abdala, 2003
- Liolaemus melanops* Burmeister, 1888
- Liolaemus martorii* Abdala, 2003
- Liolaemus morenoi* Etheridge and Christie, 2003
- Liolaemus multimaculatus* Duméril and Bibron, 1837
- Liolaemus petrophilus* Donoso-Barros and Cei, 1971
- Liolaemus pictus argentinus* Müller and Hellmich, 1939
- Liolaemus rothi* Koslowsky, 1898
- Liolaemus shitan* Abdala, Quinteros, Scrocchi and Stazzonelli, 2010
- Liolaemus somuncurae* Cei and Scolaro, 1981
- Liolaemus tehuelche* Abdala, 2003
- Liolaemus telsen* Cei and Scolaro, 1999
- Liolaemus wiegmannii* Duméril and Bibron, 1837

Phymaturus

- Phymaturus agilis* Scolaro, Ibargüengoytía and Pincheira-Donoso, 2008
- Phymaturus ceii* Scolaro and Ibargüengoytía, 2007
- Phymaturus desuetus* Scolaro and Tappari, 2009
- Phymaturus etheridgei* Lobo, Abdala and Valdecantos, 2010
- Phymaturus excelsus* Lobo and Quinteros, 2005
- Phymaturus manuelae* Scolaro and Ibargüengoytía, 2008
- Phymaturus somuncurensis* Cei and Castro, 1973
- Phymaturus spectabilis* Lobo and Quinteros, 2005
- Phymaturus spurcus* Barbour, 1921
- Phymaturus tenebrosus* Lobo and Quinteros, 2005

Leiosauridae

Diplolaemus

- Diplolaemus darwinii* Bell, 1843
- Diplolaemus sexcinctus* Cei, Scolaro and Videla, 2003

Leiosaurus

- Leiosaurus bellii* Duméril and Bibron, 1837

Pristidactylus

- Pristidactylus nigroiugulus* Cei, Scolaro and Videla, 2001
- Pristidactylus fasciatus* D’Orbigny and Bibron, 1837

Tropiduridae

Stenocercus

- Stenocercus pectinatus* Duméril and Bibron, 1837

Phyllodactylidae

Homonota

- Homonota darwinii* Boulenger, 1885
- Homonota fasciata* Duméril and Bibron, 1839
- Homonota underwoodi* Kluge, 1964

Teiidae

Teius

- Teius oculatus* D’Orbigny and Bibron, 1837

Cnemidophorus

- Cnemidophorus longicaudus* Bell, 1843

Tupinambis

- Tupinambis rufescens* Günther, 1871

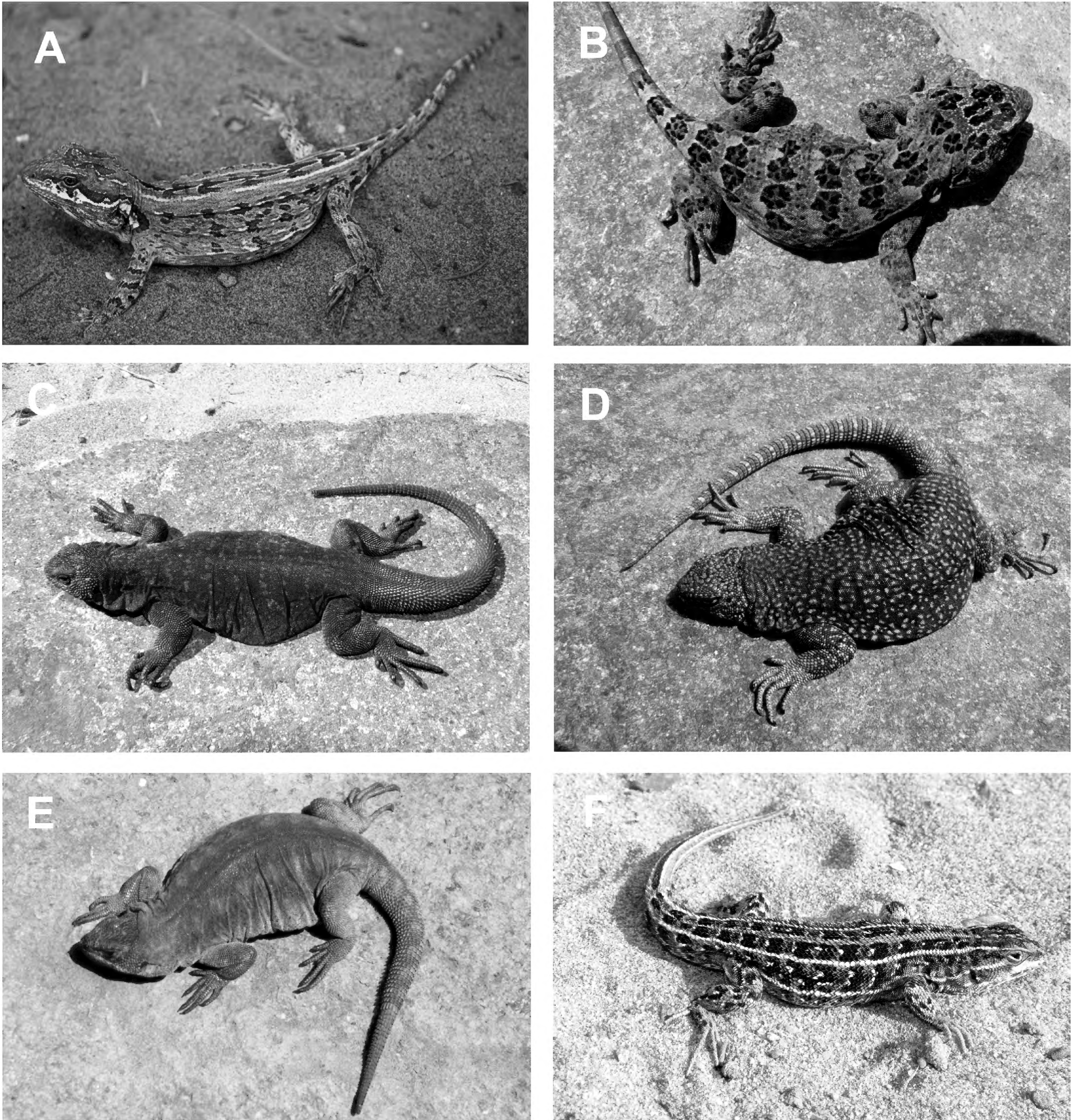


FIGURE 3. Some of the species of lizards from the Río Negro province, Argentina: (A) *Leiosaurus bellii*, (B) *Diplolaemus sexcinctus*, (C) *Phymaturus tenebrosus*, (D) *Phymaturus somuncurensis*, (E) *Phymaturus spurus*, (F) *Liolaemus lineomaculatus*.

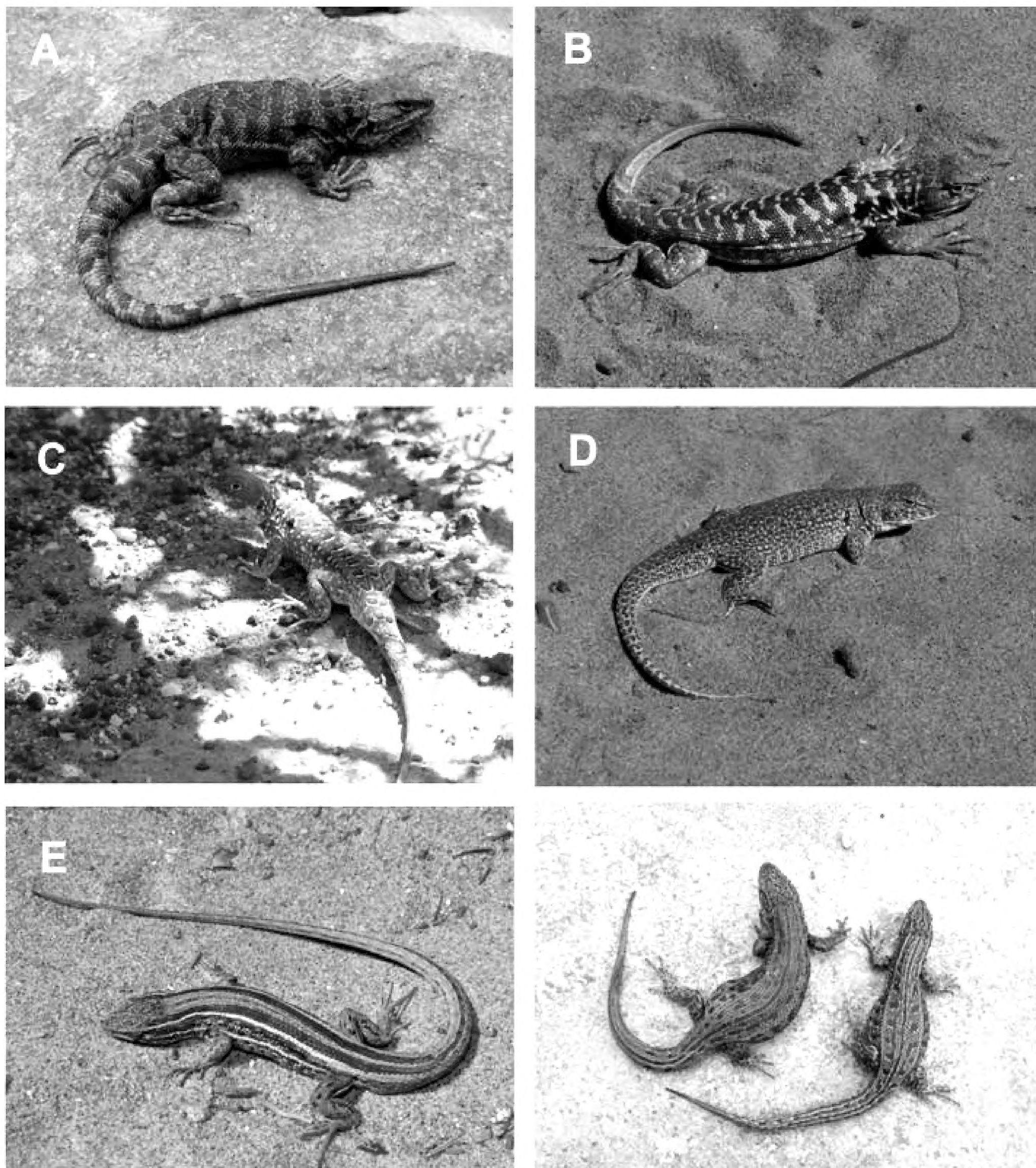


FIGURE 4. Some of the species of lizards from the Río Negro province, Argentina: (A) *Liolaemus rothi*, (B) *Liolaemus martorii*, (C) *Liolaemus goetschi*, (D) *Liolaemus multimaculatus*, (E) *Liolaemus gracilis*, (F) *Liolaemus gracilis*.

TABLE 1. Species by Departament. Department names: GR General Roca, AV Avellaneda, PM Pichi Mahuida, GC General Conesa, AA Adolfo Alsina, EC El Cuy, SA San Antonio, VA Valcheta, NJ 9 de Julio, VM 25 de Mayo, PI Pilcaniyeu, NO Ñorquinco, BA Bariloche. * Voucher specimen. + Observed specimen (no voucher).

TAXA	DEPARTMENT													Marked points in the map
	GR	AV	PM	GC	AA	EC	SA	VA	NJ	VM	PI	ÑO	BA	
LIOLAEMIDAE														
														16, 44, 45, 46, 47, 48, 55, 56, 57, 59, 60, 61, 62, 64, 66, 67, 69, 70, 73, 74, 75, 77, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 97, 101, 103, 104, 106
<i>Liolaemus bibronii</i>	*					*		*	*	*	*	*	*	
<i>Liolaemus boulengeri</i>														47
<i>Liolaemus casamiquelai</i>						*				*				66, 67, 70, 72, 104, 118
														5, 9, 10, 12, 14, 15, 16, 17, 18, 19, 20, 21, 23, 24, 25, 27, 30, 31, 32, 33, 34, 35, 37, 39, 41, 42, 43, 44, 48, 49, 50, 53, 62, 63, 64, 65, 98, 99, 100, 102, 108, 110, 112, 113, 114, 116, 117, 119
<i>Liolaemus darwinii</i>	*	*	*		*	*	*	*	*					
														57, 66, 70, 72, 73, 74, 75, 77, 78, 79, 80, 82, 83, 84, 85, 87, 88, 89, 90, 91, 92
<i>Liolaemus elongatus</i>						*				*	*	*	*	
<i>Liolaemus goetschi</i>	*													21, 22, 62, 64, 116, 121
<i>Liolaemus gracilis</i>	*	+			*	*	*	*						4, 5, 9, 17, 19, 20, 27, 34, 62, 99, 100, 108
<i>Liolaemus grosseorum</i>	*													22, 117
														53, 54, 55, 60, 61, 62, 66, 67, 68, 69, 70, 72, 74, 76, 77, 88, 118
<i>Liolaemus inacayali</i>						*			*	*	*	*		
<i>Liolaemus kriegi</i>						*				*		*		69, 73, 74, 75, 78, 79, 89
<i>Liolaemus lineomaculatus</i>											*		*	92, 93
<i>Liolaemus loboii</i>													*	92
<i>Liolaemus melanops</i>								*	*					60, 44, 45, 48, 53, 54
<i>Liolaemus martorii</i>					*		*	*						2, 4, 27, 28, 29, 108
<i>Liolaemus morenoi</i>											*			87
<i>Liolaemus multimaculatus</i>					*									1, 4, 5
														44, 46, 47, 48, 50, 54, 55, 59, 60, 61, 62, 64, 69, 70, 75, 77, 106
<i>Liolaemus petrophilus</i>						*		*	*	*		*		
													*	92, 93, 94, 95, 96, 97, 105, 121
<i>Liolaemus pictus argentinus</i>														
<i>Liolaemus rothi</i>						*		*	*	*	*	*		46, 48, 57, 60, 61, 70, 72, 73, 74, 75, 77, 85, 88, 89, 90, 103, 104
<i>Liolaemus shitan</i>						*				*				61, 103, 104
<i>Liolaemus somuncurae</i>								*		*				47, 72
<i>Liolaemus tehuelche</i>											*			84, 85
<i>Liolaemus telsen</i>								*						47
<i>Liolaemus wiegmannii</i>					*									3
<i>Phymaturus agilis</i>										*				70
<i>Phymaturus ceii</i>						*				*				61, 89, 90, 120
<i>Phymaturus desuetus</i>										*				70
<i>Phymaturus etheridgei</i>										*				72, 73
<i>Phymaturus excelsus</i>												*		75
<i>Phymaturus manuelae</i>											*			123
<i>Phymaturus somuncurensis</i>								*	*	*				46, 47, 48, 49, 51
<i>Phymaturus spectabilis</i>										*		*		72, 75
<i>Phymaturus spurcus</i>										*		*		74, 75, 79
<i>Phymaturus tenebrosus</i>											*			84, 85

TABLE 1. CONTINUED.

TAXA	DEPARTMENT													Marked points in the map
	GR	AV	PM	GC	AA	EC	SA	VA	NJ	VM	PI	ÑO	BA	
LEIOSAURIDAE														
<i>Diplolaemus darwinii</i>											*			79
<i>Diplolaemus sexcinctus</i>								*		*	*	*	*	46, 47, 48, 57, 58, 60, 69, 72, 79, 81, 83, 92
<i>Leiosaurus bellii</i>	*				*	*	*	*	*	*			*	4, 5, 17, 19, 20, 24, 27, 29, 45, 47, 60, 62, 67, 70, 94, 101, 109, 111
<i>Pristidactylus nigroiugulus</i>										*				55, 61, 67, 69
<i>Pristidactylus fasciatus</i>	*													17
TROPIDURIDAE														
<i>Stenocercus pectinatus</i>		*	*		*									3, 8, 10, 107
PHYLLODACTYLIDAE														
<i>Homonota darwinii</i>			*		*	*	*	*	*	*	*	*		4, 5, 27, 30, 33, 36, 45, 52, 53, 60, 61, 64, 71, 73, 75, 79, 84, 85, 89, 90, 100, 106
<i>Homonota fasciata</i>	*	*												6, 7, 10, 15, 17, 19
<i>Homonota underwoodi</i>	*	*												10, 12, 19, 20
TEIIDAE														
<i>Teius oculatus</i>		+												10
<i>Cnemidophorus longicaudus</i>	*	*			*		*	*	*					5, 9, 10, 12, 15, 19, 26, 27, 37, 39, 41, 99, 108, 109, 110, 113, 117
<i>Tupinambis rufescens</i>	+	+						+						11, 13, 38, 40

TABLE 2. Species listed by ecological area. CO Cordillera. PC Precordillera, SP Sierras and Plateau, CP Central Plateau, SM Southern Monte, TM Transitional Monte, PM Pampean Monte. * Captured specimen. + Observed specimen. Ecological Areas according to INTA Bariloche (Bran et al. 2000).

TAXA	ECOLOGICAL AREA						
	CO	PC	SP	CP	SM	TM	PM
Liolaemidae							
<i>Liolaemus bibronii</i>	*	*	*	*	*		
<i>Liolaemus boulengeri</i>				*			
<i>Liolaemus casamiquelai</i>			*	*			
<i>Liolaemus darwinii</i>			*	*	*	*	*
<i>Liolaemus elongatus</i>	*	*	*	*			
<i>Liolaemus goetschi</i>					*		
<i>Liolaemus gracilis</i>					*	*	
<i>Liolaemus grosseorum</i>					*		
<i>Liolaemus inacayali</i>			*	*	*		
<i>Liolaemus kriegi</i>		*	*	*			
<i>Liolaemus lineomaculatus</i>	*						
<i>Liolaemus loboii</i>	*						
<i>Liolaemus melanops</i>			*	*	*		
<i>Liolaemus martorii</i>					*	*	
<i>Liolaemus morenoi</i>			*				
<i>Liolaemus multimaculatus</i>						*	
<i>Liolaemus petrophilus</i>			*	*	*		
<i>Liolaemus pictus argentinus</i>	*						
<i>Liolaemus rothi</i>			*	*	*		
<i>Liolaemus shitan</i>				*	*		
<i>Liolaemus somuncurae</i>			*	*			
<i>Liolaemus tehuelche</i>			*				
<i>Liolaemus telsen</i>				*			
<i>Liolaemus wiegmannii</i>						*	
<i>Phymaturus agilis</i>				*			
<i>Phymaturus ceii</i>			*	*			
<i>Phymaturus desuetus</i>				*			
<i>Phymaturus etheridgei</i>			*	*			

TABLE 2. CONTINUED.

TAXA	ECOLOGICAL AREA						
	CO	PC	SP	CP	SM	TM	PM
<i>Phymaturus excelsus</i>			*				
<i>Phymaturus manuelae</i>			*				
<i>Phymaturus somuncurensis</i>			*	*	*		
<i>Phymaturus spectabilis</i>			*				
<i>Phymaturus spurcus</i>			*				
<i>Phymaturus tenebrosus</i>			*				
Leiosauridae							
<i>Diplolaemus darwinii</i>					*		
<i>Diplolaemus sexcinctus</i>	*		*	*	*		
<i>Leiosaurus bellii</i>	*		*	*	*	*	
<i>Pristidactylus nigroiugulus</i>			*	*			
<i>Pristidactylus fasciatus</i>					*		
Tropiduridae							
<i>Stenocercus pectinatus</i>					+	*	
Phyllodactylidae							
<i>Homonota darwinii</i>			*	*	*	*	
<i>Homonota fasciata</i>					*		
<i>Homonota underwoodi</i>					*		
Teiidae							
<i>Teius oculatus</i>						+	
<i>Cnemidophorus longicaudus</i>					*	*	
<i>Tupinambis rufescens</i>					+		

ACKNOWLEDGMENTS: We thank M. Failla, director of Wildlife Agency of Rio Negro Province for collection permits. We thank N. Feltrin, M.F. Breitman, J. Goldman, C. Zannotti, D. Udrizar Sauthier, A. Cosacov, P. Petracci and K. Delhey for assisting in collecting lizards. Field trips were supported by several grants issued to L.J. Avila by CONICET (CONICET PEI 0178/98, PEI 6397/01, PIP 6469/05) and ANPCyT (FONCYT PICT 1998 1-04867, PICT 2006-00506); to M. Morando ANPCyT (FONCYT PICT 2005 33789); to Jack W. Sites, Jr. (several grants from M.L. Bean Life Science Museum, Kennedy Center for International Studies, College of Agriculture, Department of Biology of Brigham Young University and NSF award DEB 98-15881), and J. Johnson et al. (Speciation in Patagonia: establishing sustainable international collaborations in evolution, ecology, and conservation biology. National Science Foundation, PIRE OISE 0530267). We thank G. Scrocchi and S. Kretschmar (FML), C. Cicero (MVZ); J. Williams (MLP, Museo de La Plata), and G. Carrizo (MACN) for providing access to collections under their care.

LITERATURE CITED

Abdala, C.S. 2002. Nuevo *Liolaemus* (Iguania: Liolaemidae) perteneciente al grupo *boulengeri* de la provincia de Neuquén, Argentina. *Cuadernos de Herpetología* 16(1): 3-13.

Abdala, C.S. 2003. Cuatro nuevas especies del género *Liolaemus* (Iguania: Liolaemidae), pertenecientes al grupo *boulengeri*, de la Patagonia, Argentina. *Cuadernos de Herpetología* 17(1-2): 3-32.

Abdala, C.S. 2005. Dos nuevas especies del Género *Liolaemus* (Iguania: Liolaemidae) y redescrición de *Liolaemus boulengeri* (Koslowsky, 1898). *Cuadernos de Herpetología* 19(1): 3-33.

Abdala, C.S. 2007. Phylogeny of the *boulengeri* group (Iguania: Liolaemidae, *Liolaemus*) based on morphological and molecular characters. *Zootaxa* 1538: 1-84.

Abdala, C.S., A.S. Quinteros, G.J. Scrocchi and J.C. Stazzonelli. 2010. Three new species of the *Liolaemus elongatus* group (Iguania: Liolaemidae) from Argentina. *Cuadernos de Herpetología* 24(2): 93-109.

Acosta, J.C., L.J. Avila and G. Blanco. 1996a. Ecología de *Liolaemus boulengeri* (Sauria: Tropiduridae) en el Noroeste de la meseta patagónica (Ing. Jacobacci, Río Negro, Argentina). *Cuadernos de Herpetología* 9(2): 40-47.

Acosta, J.C., G. Blanco and L.J. Avila. 1996b. Organización espacial de una comunidad de saurios del Sur de la Provincia de Río Negro - Argentina. *FACENA* 12: 145-149.

Anonymous. 2008. *Instituto Nacional de Estadística y Censos (INDEC) e Instituto Geográfico Militar (IGM)*. Electronic database accessible at <http://www.Indec.gov.ar/nuevaweb/cuadros/1/q010301.xls>. Captured on 10 October 2008.

Avila, L.J. 2002. Geographic distribution of lizards of the genus *Teius* (Squamata: Teiidae: Teiinae) in southern South America. *Biogeographica* 78(1):15-33.

Avila, L.J. and F. D’Hervé. 1999. Natural History Notes: *Leiosaurus bellii*. Clutch. *Herpetological Review* 30(2): 97.

Avila, L.J., N. Frutos, M. Morando, C.H.F. Perez and M. Kozykariski. 2006a. Reptilia: Iguania, Liolaemini, *Liolaemus petrophilus* and *Liolaemus pictus*: distribution extensión, filling gaps, new records. *Check List* 2(2): 65-69.

Avila, L.J., N. Frutos, M. Morando, C.H.F. Perez and D.R. Perez. 2006b. New records of *Liolaemus inacayali* ABDALA 2003 in western Rio Negro province, Patagonia, Argentina. *Herpetozoa* 19(1/2): 91-92

Avila, L.J., N. Frutos, C.H.F. Perez and M. Morando. 2007. Reptilia, Iguania, Liolaemidae, *Liolaemus somuncurae*: Distribution extension. *Check List* 3(1): 11-13.

Avila, L.J., R. Montero and M. Morando. 2000. Categorización de las lagartijas y anfisbenas de Argentina; p. 51-74 *In* E.O. Lavilla, E. Richard and G.J. Scrocchi (ed.). *Categorización de Anfibios y Reptiles de Argentina*. Tucumán: Asociación Herpetológica Argentina.108 p.

Avila, L.J. and M. Morando. 2002. Natural History Notes: *Liolaemus petrophilus*. Saurophagy. *Herpetological Review* 33(1): 52.

Avila, L.J., M. Morando and C.H. Pérez. 2003. New records and natural history notes for *Pristidactylus nigroiugulus* Cei, Scolaro and Videla, 2001 from Río Negro and Chubut provinces, Argentina. *Herpetozoa* 16: 83-86.

Avila, L.J., M. Morando, C.H. Pérez and J.W. Sites. 2004a. New records and natural history notes of lizards of the genus *Liolaemus* in northern Patagonia. *Herpetozoa* 17: 83-86.

Avila, L.J., M. Morando, C.H.F. Perez and J.W. Sites, Jr. 2004b. Phylogenetic relationships of lizards of the *Liolaemus petrophilus* group (Squamata, Liolaemidae), with description of two new species from western Argentina. *Herpetologica* 60(2):187-203.

Avila, L.J., M. Morando and D.R. Pérez. 1999. *Phymaturus patagonica*. Geographic distribution, *Herpetological Review* 30: 182.

Avila, L.J., M. Morando and D.R. Pérez. 2001. New records and natural history notes for lizards and snakes from Patagonia, Argentina. *Herpetological Review* 32: 64-65.

Avila, L.J., M. Morando and J.W. Sites, Jr. 2006c. Congeneric phylogeography: Hypothesizing species limits and evolutionary processes in Patagonian lizards of the *Liolaemus boulengeri* group (Squamata: Liolaemini). *Biological Journal of the Linnean Society* 89(2): 241-275.

Avila, L.J., C.H. Pérez, M. Morando and N. Frutos. 2002. New records for *Liolaemus grosseorum* Etheridge, 2001 (Reptilia: Squamata: Liolaemidae) from northwestern Patagonia. *Bulletin of Chicago Herpetological Society* 37(6): 100-101.

Avila, L.J., C.H.F. Pérez, M. Morando and J.W. Sites, Jr. 2010. A new species of *Liolaemus* (Reptilia: Squamata) from southwestern Rio Negro province, northern Patagonia, Argentina. *Zootaxa* 2434: 47-59.

Belver, L.C. and L.J. Avila. 2002. Diet composition of *Liolaemus bibronii* (Iguania: Liolaemidae) in south Rio Negro Province, Argentina.

- Herpetological Journal* 12(1): 39-42.
- Bran, D., J. Ayasa and C. Lopez. 2000. *Regiones ecológicas de Río Negro*. Electronic database accessible at: <http://www.inta.gov.ar/bariloche/info/catalog/Teledeteccion/AreasEcologicas%20RN.pdf> INTA (Instituto Nacional de Tecnología Agropecuaria), Bariloche, Río Negro, Argentina. Captured on 20 July 2007.
- Cabrera, A.L. 1971. Fitogeografía de la República Argentina. *Boletín de la Sociedad Argentina de Botánica* 14(1-2): 1-42.
- Cei, J.M. 1986. Reptiles del centro, centro-oeste y sur de la Argentina. Herpetofauna de las zonas áridas y semiáridas. *Monografie IV. Museo Regionale di Scienze Naturali Torino* 1-527.
- Cei, J.M. and J.A. Scolaro. 1996. A new species of *Liolaemus* of the *archeforus* group from the pre-Andean valley of the Zeballos river, Santa Cruz Province, Argentina (Reptilia, Tropicuridae). *Bollettino del Museo Regionale di Scienze Naturali* 14(2): 389-401.
- Cruz, F.B., J.A. Schulte II and P. Bellagamba. 1999. New distributional records and natural history notes for reptiles from southern Argentina. *Herpetological Review* 30(3): 182.
- Etheridge, R. 2001. A new species of *Liolaemus* (Reptilia: Squamata: Tropicuridae) from Mendoza Province, Argentina. *Cuadernos de Herpetología* 15(1): 3-15.
- Etheridge, R. and M.I. Christie, 2003. Two new species of the lizard genus *Liolaemus* (Squamata: liolaemidae) northern Patagonia, with comments on *Liolaemus rothi*. *Journal of Herpetology* 37(2): 325-341.
- Frutos, N., C.H.F. Perez, M. Kozykariski, M. Morando and L.J. Avila. 2007. Geographic distribution: *Liolaemus telsen*. *Herpetological Review* 38(2): 219.
- Ibargüengoytia, N. 2004. Prolonged Cycles as a Common Reproductive Pattern in Viviparous Lizards from Patagonia, Argentina: Reproductive Cycle of *Phymaturus patagonicus*. *Journal of Herpetology* 38(1): 73-79
- Ibargüengoytia, N. 2005. Field, selected bodytemperature and thermal tolerance of the syntopic lizards *Phymaturus patagonicus* and *Liolaemus elongatus* (Iguania: Liolaemidae). *Journal of Arid Environments* 62: 435-448.
- Ibargüengoytia, N. and L.M. Casalins. 2007. Reproductive Biology of the Southernmost Gecko *Homonota darwini*: Convergent Life-History Patterns among Southern Hemisphere Reptiles Living in Harsh Environments. *Journal of Herpetology* 41(1): 71-79.
- Ibargüengoytia, N., L.M. Casalins, J.A. Schulte II, G.C. Amico and L. Symphon. 2001. *Liolaemus lineomaculatus*. Geographic distribution, *Herpetological Review* 32(2): 120.
- Ibargüengoytia, N. R., J.C. Acosta, J.M. Boretto, H.J. Villavicencio, J.A. Marinero and J.D. Krenz. 2008. Field thermal biology in *Phymaturus* lizards: Comparisons from the Andes to the Patagonian steppe in Argentina. *Journal of Arid Environments* 72: 1620-1630.
- Lobo, F., C.S. Abdala and S. Valdecantos. 2010. Taxonomic studies of the genus *Phymaturus* (Iguania: Liolaemidae): Description of four new species. *South American Journal of Herpetology* 5(2): 102-126.
- Lobo, F. and S. Quinteros. 2005a. A morphology-based phylogeny of *Phymaturus* (Iguania: liolaemidae) with the description of four new species from Argentina. *Papeis Avulsos de Zoologia* 45(13): 143-177.
- Lobo, F. and S. Quinteros. 2005b. Taxonomic studies of the genus *Phymaturus* (Iguania: Liolaemidae): Redescription of *Phymaturus patagonicus* Koslowsky, 1898, and revalidation and redescription of *Phymaturus spurcus* Barbour 1921. *Journal of Herpetology* 39(4): 13-20.
- Morando, M., L.J. Avila, J.J. Baker and J.W. Sites, Jr. 2004. Phylogeny and phylogeography of the *Liolaemus darwini* complex (Squamata: Liolaemidae): evidence for introgression and incomplete lineage sorting. *Evolution* 58(4): 842-861.
- Morando, M., L.J. Avila and J.W. Sites, Jr. 2003. Sampling strategies for delimiting species: genes, individuals, and populations in the *Liolaemus elongatus-kriegi* complex (Squamata: Liolaemidae) in Andean – Patagonian South America. *Systematic Biology* 52(2): 159-185.
- Morando, M., L.J. Avila, C. Turner and J.W. Sites, Jr. 2007. Molecular evidence for species complex in the Patagonian lizard *Liolaemus bibronii* and phylogeography of the closely related *Liolaemus gracilis* (Squamata: Liolaemini). *Molecular phylogenetics and evolution* 43(3): 952-973.
- Nori, J., C.S. Abdala and G.J. Scrocchi. 2010a. Reptilia, Iguania, Liolaemidae, *Liolaemus goetschi* Müller and Hellmich, 1938: Distribution extension. *Check List* 6(1): 3-4.
- Nori, J., C.S. Abdala and G.J. Scrocchi. 2010b. *Liolaemus goetschi* (Iguania: Liolaemidae): redescription and phylogenetic relationships within the *L. boulengeri* group. *Zootaxa* 2440: 49-59.
- Perez, D.R. and L.J. Avila. 2005. Natural History Notes: *Liolaemus petrophilus*. Predation. *Herpetological Review* 36(4): 451-452.
- Perez, C.H.F., N. Frutos, M. Morando, M. Kozykariski, D.R. Perez and L.J. Avila. 2008. Southernmost records for *Homonota fasciata* (Duméril and Bibron, 1836) in northern Patagonia, Argentina. *Herpetozoa* 20(3/4): 182-184.
- Pérez, C.H.F. and D.R. Pérez. 2001. *Liolaemus bibroni*. Geographic distribution, *Herpetological Review* 32(4): 276.
- Pérez, D.R., C.H.F. Pérez and L.J. Avila. 2005. *Homonota underwoodi*. Geographic distribution, *Herpetological Review* 36(4): 468.
- Schilthuizen, M. 2000. Ecotone: speciation –prone. *TREE* 15: 130-131.
- Scolaro, J.A. 2006. *Reptiles patagónicos: Norte. Una guía de campo*. Comodoro Rivadavia: Ediciones Universidad Nacional de la Patagonia San Juan Bosco. 112 p.
- Scolaro, J.A. and N.R. Ibargüengoytia. 2007. A new species of *Phymaturus* from rocky outcrops in the central steppe of Rio Negro province, Patagonia Argentina (Reptilia: Iguania: Liolaemidae). *Zootaxa* 1524: 47-55.
- Scolaro, J.A. and N. R. Ibargüengoytia. 2008. A new fragment for the understanding of the puzzling evolutive process of the *Phymaturus* genus: a new species of the *patagonicus* group from Patagonia, Argentina (Reptilia: Iguania: Liolaemidae). *Zootaxa* 1939: 38-50.
- Scolaro, J.A., N.R. Ibargüengoytia and D. Pincheira –Donoso. 2008. When starvation challenges the tradition of niche conservatism: On a new species of the saxicolous genus *Phymaturus* from Patagonia Argentina with pseudoarboreal foraging behaviour (Iguania, Liolaemidae). *Zootaxa* 1786: 48-60.
- Scolaro, J.A. and O.F. Tappari. 2009. Una nueva especie del género *Phymaturus* del “grupo *Patagonicus*” en los afloramientos rocosos del sudoeste de la provincia de Río Negro, Patagonia Argentina (Reptilia, Iguania, Liolaemidae). *Naturalia Patagónica* 5(1): 80-93.
- Scrocchi, G. J., C.C. Abdala, J. Nori and H. Zaher. 2010. *Resptiles de la provincial de Rio Negro, Argentina*. Viedma: Ed. Fondo Rionegrino. 252 p.
- Vega, L.E. and P.J. Bellagamba. 1994. Reptiles de la reserva de usos múltiples Caleta de Los Loros, Río Negro, Argentina. *Cuadernos de Herpetología* 8(1): 141-145.
- Yokes, M., M. Morando, L.J. Avila, and J.W. Sites, Jr. 2006. Phylogeography and genetic structure in the *Cnemidophorus longicauda* complex (Squamata, Teiidae). *Herpetologica* 62(4): 424-438.

RECEIVED: November 2008

LAST REVISED: March 2011

ACCEPTED: April 2011

PUBLISHED ONLINE: May 2011

EDITORIAL RESPONSIBILITY: Alexandro Marques Tozetti

APPENDIX 1. Specimens examined

***Liolaemus bibroni*.** General Roca Department: Chichinales (16) (39°06' S, 66°56' W): FML 10360. Valcheta Department: Ruta Provincial 60, 10 km S Chipauquil (45) (41°00' S, 66°44' W): MLPS 2576; Ruta Provincial 60, 17 km S Chipauquil (45) (41°03' S, 66°46' W): BYU 46722; cerró Corona Chico, Somuncurá (47) (1350 m): MACN 38553; laguna Paraguay, Somuncurá (47): MACN 38554; Arroyo Ventana, estancia Rincón, Somuncurá (44): MACN 37723-24; camino vecinal, subida a meseta de Somuncurá por puesto Luis Ovejero, a 49,1 km W desde pueblo Arroyo de la Ventana (48) (41°34' S, 66°30' W, 875 m): LJAMM 3247-3248; camino vecinal, subida a meseta de Somuncurá por puesto Luis Ovejero, a 51,1 km W desde pueblo Arroyo de la Ventana (48) (41°34' S, 66°31' W, 887 m): LJAMM 3267; camino vecinal a meseta de Somuncurá a 14.5 km NW puesto Luis Ovejero (48) (41°33' S, 66°36' W, 975 m): LJAMM 3312; Ruta Provincial 60, 28 km SW puesto policial entrada meseta de Somuncurá (46) (41°07' S, 66°49' W, 918 m): LJAMM 3353; Ruta provincial 5, 20 km W Arroyo de la Ventana (48) (41°43' S, 66°18' W, 726 m): LJAMM 3227-3228; Aguada del Toro, Meseta de Somuncura (106) (41°17'4.164" S, 66°28' 25.1040" W, 840 m): LJAMM 8209. 25 de Mayo Department: 7,5 km W Los Menucos, cantera de lajas (60) (40°51' S, 68°10' W, 913 m): MLPS 2577; Ruta Provincial 8, 15,5 km N Los Menucos (60) (40°45' S, 68°13' W, 902 m): LJAMM 3374; Ingeniero Jacobacci (70) (41°18' S, 69°35' W): LJAMM 215; Ruta Nacional 23, 10 km W Ingeniero Jacobacci (70) (41°20' S, 69°41' W): LJAMM 5574; Ruta Provincial 8, 24 km NW Los Menucos (59) (40°42' S, 68°16' W): FML 09150; Ruta Provincial 5, 22 km NW El Cain (57) (41°35' S, 68°22' W, 1165 m): LJAMM 6224-6225; Ruta Provincial 5, ~50 km NW El Cain (69) (41°30' S, 68°35' W, 955 m): LJAMM 6242-6243; Ruta Provincial 8, 17.9 km N limite Chubut-Rio Negro (56) (41°51' S, 68°04' W, 1111 m): LJAMM 6214-6215; Ruta Provincial 6, 1 km NW Ojos de Agua (75) (41°32' S, 69°51' W): LJAMM 2339; Ruta Provincial 8, 6 km S La Esperanza (61) (40°26' S, 68°28' W): LJAMM 1621; Ruta Provincial 8, 17 km S San Antonio del El Cuy (61) (40°17' S, 68°27' W): LJAMM 1645; Ruta Provincial 5, 40 km SE Maquinchao (69) (41°39' S, 68°33' W): BYU 47182-47184; Ruta Nacional 23, 14 km W Aguada de Guerra (67) (41°09' S, 68°30' W): BYU 47183; Ruta Provincial 76, 57 km S empalme Ruta Nacional 23 (73) (41°45' S, 69°21' S): LJAMM

3569; Ruta Nacional 23, cerro frente a estancia Huanuluan, 25,1 km W Ingeniero Jacobacci (74) (41°21' S, 69°48' W): LJAMM 3587-3588; Ruta Nacional 23, 44 km W Ingeniero Jacobacci, 10 km E Clemente Onelli (74) (41°16' S, 69°58' W): LJAMM 3599. El Cuy Department: El Cuy (62) (39°56' S, 68°20' W): LJAMM 1581; Ruta Provincial 67, 19,2 km NE Mencue (90) (40°19' S, 69°26' W): LJAMM 5539; Ruta Provincial 67, 20 km S Mencue (89) (40°34' S, 69°44' W): LJAMM 5551; Cerro Policia, arriba de meseta (64) (39°44' S, 68°28' W, 840 m): LJAMM 6264; Ruta provincial 74 (camino a Renteria), 34,3 km N empalme Ruta provincial 71 (101) (39°24' S, 68°27' W, 848 m): LJAMM 6272-6273; Ruta Provincial 74, paraje Chasico (puesto abandonado), 4 km N cruce Rutas Provincial 6 y 67 (104) (40°17' S, 68°58' W, 988 m): LJAMM 6278; Ruta provincial 74, 20 km SW Aguada Guzman (103) (40°07' S, 68°56' W, 935 m): LJAMM 6279-6280. 9 de Julio Department: Ruta Nacional 23, 38,4 SW Sierra Colorada, 7 km E Los Menucos (60) (40°47' S, 68°021' W, 816 m): LJAMM 3367-3368; Ruta Provincial 5, 7,2 km E de El Cain, cerca de laguna de las Vacas (55) (41°41' S, 68°04' W, 1016 m): LJAMM 6217-6218. Pilcaniyeu Department: arroyo Fragua y Ruta Nacional 23 (91): MACN 37268; Ruta Provincial 23, 4,8 km SE Comallo (87) (41°02' S, 70°12' W, 808 m): LJAMM 5588; Ruta Provincial 67, 3,5 km N Cañadon Chileno (88) (40°51' S, 69°58' W, 1265 m): LJAMM 5616; Ruta Provincial 67, 2 km N Cañadon Chileno, 37 km NE Comallo (88) (40°52' S, 70°01' W, 1230 m): LJAMM 5646; Ruta Nacional 40, 2,7 km S estancia San Pedro (84) (40°52' S, 70°34' W, 1096 m): LJAMM 5403; Ruta Nacional 40, 15 km S entrada Alicura (86) (40°40' S, 70°42' W): LJAMM 5402; 17 km NE Pilcaniyeu, INTA Experimental Station (83) (41°01' S, 70°28' W): MVZ 180042; INTA Experimental farm, ca. 15 km E Pilcaniyeu viejo (83) (41°04' S, 70°32' W): MVZ 180052-67; Perito Moreno (82): MACN 35921; Ruta Nacional 40, cerro Alto (85) (40°46' S, 70°34' W, 1203 m): LJAMM 8685. Ñorquinco Department: Ruta Provincial 6, 31 km N Ñorquinco (77) (47°46' S, 70°37' W): LJAMM 2166; río Chenqueniye, 10 km E and 3 km S cerro Pico Quemado (80) (41°31' S, 71°00' W): MVZ 188652; Río Chico (Estación Cerro Mesa) (77) (41°42' S, 70°29' W): LJAMM 3518; Ruta Provincial 6, 10,2 km W entrada a Río Chico (Estación Cerro Mesa) (77) (41°45' S, 70°31' W): LJAMM 3529-3530. Bariloche Department: ridge above refugio Neumeyer, 15 km S Bariloche (92) (41°15' S, 71°18' W): MVZ 188685; El Bolsón (97) (41°58' S, 71°31' W): MACN 14821; Ruta Provincial 80, 6 km E, 2 km N cerro Bernal (92) (41°12' S, 71°07' W): MVZ 232261-232262.

Liolaemus boulengeri. 9 de Julio Department: 65.6 km destacamento policial El Rincon, cerca de cerro Corona, entre cerro Corona Grande y cerro Corona Chico (47) (41°23' S, 66°57' W, 1425 m): LJAMM-CNP 6839, 6877.

Liolaemus casamiquelai. 25 de Mayo Department: laguna Carri Lafquen Chica, 7 km N Ingeniero Jacobacci (70) (41°13' S, 69°24' W, 855 m): MACN 39041, MLP-S 2599-2600, LJAMM-CNP 2948-2949; Ingeniero Jacobacci (70) (41°18' S, 69°35' W): LJAMM 2808; Ruta Provincial 6, 64 km NE Ingeniero Jacobacci (66) (40°53' S, 69°17' W, 854 m): LJAMM 2975; Ruta Nacional 23, 14 km W Aguada de Guerra (67) (41°09' S, 68°30' W, 866 m): MACN 39042-39045, MLP- S 2601-3, LJAMM-CNP 2977, 79, 80, 86, 4878; Aguada de Guerra, 1 km N pueblo, cerca del hipódromo (118) (41°03' S, 68°22' W, 896 m): LJAMM 8677; Laguna Cari Lafquen Chica and Ruta Provincial 6, 10 km N junction Ruta Nacional 23 (70) (41°13' 51.8"S, 69°24' 55.7"W, 834m): LJAMM-CNP 11090-92; Ruta Nacional 23, 22.3 km E Ingeniero Jacobacci (72) (41°18' 16"S, 69°17' 09,1"S, 860 m): LJAMM-CNP 11101-02. El Cuy Department: Ruta Provincial 74, 33.2 km N Chasico (road to Aguada Guzman), 33.2 km N junction Ruta Provincial 6 (104) (40°02' 37.8"S, 68°54' 53.1"W, 876 m): LJAMM-CNP 11099 -11100.

Liolaemus darwinii. Pichi Mahuida Department: Ruta provincial 50, 75,4 km S Río Colorado, camino a Guardia Mitre (112) (39°31' S 63°47' W, 100): LJAMM 8381. Avellaneda Department: Chelforo (12) (39°05' S, 66°32' W): FML 8294-5; Chimpay (10) (39°03' S, 66°18' W): FML 08410-08411; Ruta Provincial 66, puesto de Manzilla, 48,8 km S Villa Regina (14) (39°32' S, 67°10' W): LJAMM 3422; Ruta Provincial 66, 74 km S Villa Regina (15) (39°45' S, 67°14' W): LJAMM 3423; Ruta provincial 66, 9,4 km N empalme Ruta provincial 63, cerro Mesa (113) (39°47' S, 67°15' W, 275 m): LJAMM 8305; Ruta provincial 63, 33,8 km SW Lamarque (114) (39°37' S, 65°53' W, 174 m): LJAMM 8314; Ruta provincial 63, 37,3 km E empalme Ruta provincial 62, camino a Lamarque (114) (39°41' S, 66°06' W, 233 m): LJAMM 8389; Ruta provincial 56, antigua estacion de ferrocarril Benjamin Zorrilla, 24,5 km empalme Ruta Nacional 22, 29,5 km NE Choele Choel (115) (39°05' S, 65°28' W, 199 m): LJAMM 8368. General Roca Department: Villa Regina (19) (39°06' S, 67°05' W): LJAMM 4491; 18 km NE Villa Regina (18) (39°02' S 66°56' W): LJAMM 2408; Ruta Nacional 151, 5 km N de Catriel (24): FML 8570-1; Ruta Nacional 151, km 144, cerca de Catriel (24) (37°47' S 67°44' W): LJAMM 2399; Ruta Nacional 151, km 53 (23) (38°31' S 68°04' W): LJAMM 2399; Peñas Blancas (24) (37°42' S, 67°52' W): LJAMM 2407; Allen (25) (38°55' S, 67°48' W): LJAMM 6140-6141; 20 km N Cervantes (20): FML 08313-08314; Chichinales (16) (39°06' S, 66°56' W): LJAMM 3008; 35 km NE

Chichinales (17) (38°49' S, 66°47' W): LJAMM 95; 20 km NE Chichinales (17) (39°02' S, 66°45' W): LJAMM 93; 20 km N General Roca (21) (38°51' S, 67°3' W, 300 m): MVZ 126363; Ruta Nacional 151, 10 km S Catriel (116) (37°57' S 67°53' W, 302 m): LJAMM 8380; Ruta hacia Rincón de Los Sauces, a 19,5 km W Peñas Blancas (117) (37°37' S, 68°04' W, 424 m): LJAMM 8755. El Cuy Department: Ruta Provincial 71, 41,7 km SW empalme. Ruta Provincial 6 (100) (39°39' S, 68°24' W, 617 m): LJAMM 6271, 7057; Ruta Provincial 7, El anfiteatro, 49,1 km N empalme Ruta Provincial 71 (102) (39°17' S, 68°27' W, 637 m): LJAMM 7104-7105; Ruta Provincial 8, 26 km NE El Cuy (63) (39°44' S, 68°11' W): LJAMM 1523; El Cuy (62) (39°56' S, 68°20' W): FML 08383-08384; Ruta Provincial 71, 33,5 km NE Cerro Policía (65) (39°36' S, 68°09' W, 541 m): LJAMM 5683; Ruta Provincial 74, 10 km SW Cerro Policía, 35,7 km NE Aguada Guzman (64) (39°45' S, 68°35' W, 608 m): LJAMM 5698. 9 de Julio Department: Ruta Nacional 23, 9 km E Sierra Colorada (53) (40°33' S, 67°39' W): FML 13066, BYU 47324; Ruta Provincial 66, 27,7 km N Ministro Ramos Mexía (119) (40°16' S, 67°16' W, 432 m): LJAMM 8462; Ruta Provincial 66, 32,8 km N Ministro Ramos Mexía (119) (40°14' S, 67°15' W, 394 m): LJAMM 8634. Valcheta Department: 10,5 km NE Bajo Rico (99) (40°07' S, 66°25' W, 152 m): LJAMM 7058-7059; Bajo Rico, huella que conecta Ruta Provincial 4 y Ruta Provincial 62, 22 km W Ruta Provincial 4 (98) (40°11' S, 66°16' W, 181 m): LJAMM 7088-7089; Ruta Nacional 23, Estación Nahuel Niyeu (41) (40°30' S, 66°32' W): BYU 47325; Ruta Nacional 23, 14 km W Nahuel Niyeu (41) (40°29' S, 66°43' W): FML 13067, BYU 47326; Ruta Nacional 23, 23 km W Nahuel Niyeu, arroyo Yaminue (42) (40°29' S, 67°39' W): BYU 47325; Ruta Provincial 5 y arroyo Verde (50) (41°45' S, 66°30' W, 616 m): BYU 47327-47328; Ruta Provincial 4, laguna del Indio Muerto (39) (40°24' S, 66°02' W): LJAMM 3026; Ruta Provincial 4, 84 km S cruce Ruta Nacional 250, extremo W Gran Bajo del Gualicho (37) (40°06' S, 66°00' W): LJAMM 3031; extremo de camino vecinal a establecimiento La Polvareda (Valerio Calfin), punta de toma de agua acueducto Sierra Grande (48) (73°54' S, 66°29' W): LJAMM 3232; camino vecinal, a lo largo de acueducto a Sierra Grande (48) (41°40' S, 66°20' W, 563 m): LJAMM 3239; puesto Luis Ovejero, cerca de toma de agua para Sierra Grande en arroyo de la Ventana, al W del pueblo Arroyo de la Ventana (48) (41°34' S, 66°28' W, 779 m): LJAMM 3245-3246; camino vecinal a 12 km NW Arroyo de la Ventana (48) (41°37' S, 66°11' W, 493 m): LJAMM 3277; camino vecinal hacia meseta de Somuncurá (Estancia Cecchi), 18,4 km W Arroyo los Berros (49) (41°28' S, 66°15' W, 547 m): LJAMM 3305-3306; Ruta Provincial 60, 30 km SW Valcheta, 29,4 km NW Chipauquil (43) (40°47' S, 66°27' W, 315 m): LJAMM 3355-3356; 1 km N paraje Chipauquil (44) (40°56' S, 66°38' W): LJAMM 3036; Ruta Provincial 58, 8 km N sierras de Paileman (34) (41°04' S, 65°53' W, 316 m): LJAMM 4818; Ruta Provincial 58, La Calera (35) (40°52' S, 65°47' W, 239 m): LJAMM 4731-4732; Camino vecinal a bajo Santa Rosa, entre Ruta provincial 62 y 63, 3 km SE caserío Santa Rosa (108) (39°58' S, 66°34' W, 130 m): LJAMM 8366; Ruta provincial 62, 4 km N Nahuel Niyeu (108) (40°28' S, 66°32' W, 170 m): LJAMM 8321; Ruta provincial 62, 50 km N Nahuel Niyeu (108): LJAMM 8324; Camino vecinal que conecta Ruta provincial 62 y 63, 74 km N Nahuel Niyeu, NW estancia Las Chilcas, camino bajo Santa Rosa (108) (40°00' S, 66°32' W, 158 m): LJAMM 8387. San Antonio Department: Sierra Grande (30) (41°38' S, 65°26' W): LJAMM 4485; entrada Mina Gonzalito, Ruta Nacional 3 (31) (41°09' S, 65°23' W, 190 m): LJAMM 4743; entrada Mina Gonzalito, Ruta Provincial 61, 25 km SW Ruta Nacional 3 (32) (41°17' S, 65°35' W, 228 m): LJAMM 4816-4817; Camino vecinal a 20 km W San Antonio Oeste (110) (40°37' S, 65°10' W, 100 m): LJAMM 8302; Camino vecinal a 52,4 km NW San Antonio Oeste, bajo del Gualicho (110) (40°28' S, 65°23' W, -4 m): LJAMM 8313.

Liolaemus elongatus. 25 de Mayo Department: Ingeniero Jacobacci (70) (41°18' S, 69°35' W): LJAMM 264. Ruta Provincial 6, 64 km NE Ingeniero Jacobacci (66) (40°53' S, 69°17' W, 854 m): BYU 47092; Ruta Provincial 6, 17,4 km NE Ojos de Agua, 28 km S Ingeniero Jacobacci (75) (41°26' S, 69°46' W): LJAMM 3547-3548; Ruta Provincial 6, 1 km NW Ojos de Agua (75) (41°32' S, 69°51' W, 1144 m): LJAMM 2338; Ruta Provincial 76, 57 km S Ingeniero Jacobacci (73) (41°45' S, 69°21' W, 1162 m): FML 13069; Ruta Provincial 5, 22 km NW El Cain (57) (41°35' S, 68°22' W, 1165 m): LJAMM 6227-6228; Ruta Provincial 76, 57 km S empalme Ruta Nacional 23 (73) (41°45' S, 69°21' W): LJAMM 3537-3539; Ruta Provincial 76, 23,5 km S empalme Ruta Nacional 23, al S Ingeniero Jacobacci (72) (41°29' S, 69°25' W): LJAMM 3570-3573; Ruta Nacional 23, cerro frente a estancia Huanuluan, 25,1 km W Ingeniero Jacobacci (74) (41°21' S, 69°48' W): LJAMM 3581-3583; Ruta Nacional 23, 44 km W Ingeniero Jacobacci, 10 km E Clemente Onelli (74) (41°16' S, 69°58' W): LJAMM 3598. El Cuy Department: Ruta Provincial 67, 19,2 km NE Mencue (90) (40°19' S, 69°26' W, 1094 m): LJAMM 5532; Ruta Provincial 67, 20 km S Mencue (89) (40°34' S, 69°44' W, 1247 m): LJAMM 5559. Pilcaniyeu Department: Ruta Provincial 23, 4,8 km SE Comallo (87) (41°02' S, 70°12' W, 808 m): LJAMM 5449; Ruta Provincial 23, 2,3 km SE Comallo (87) (41°01' S, 70°14' W, 786 m): LJAMM 5424; Ruta Provincial 67, 3,5 km N Cañadon Chileno (88) (40°51' S, 69°58' W, 1265 m): LJAMM 5622; Ruta Provincial 67, 2 km N Cañadon Chileno, 37 km NE Comallo (88) (40°52' S,

70°01' W, 1230 m): LJAMM 5644; Ruta Nacional 40, 2,7 km S estancia San Pedro (84) (40°52' S, 70°34' W, 1096 m): LJAMM 5429; Route 23, 9 km E, 5 km S estación Perito Moreno (82) (41°7' S, 70°54' W): MVZ 232414-232415; Route Provincial 80, 4,5 km E, 7 km S cerro Bernal (92) (41°17' S, 71°4' W, 1100 m): MVZ 232416; rocky knoll, Cañadon Bonito, 23 km NE Pilcaniyeu (83) (40°58' S, 70°25' W): MVZ 188727-188728; Ruta Nacional 40, cerro Alto (85) (40°46' S, 70°34' W, 1203 m): LJAMM 8682. Ñorquinco Department: Ruta Nacional 40, km 1329, 23 km N El Maitén (78) (41°53' S, 70°59' W, 500 m): LJAMM 2131; río Chenqueniye, 10 km E and 3 km S cerro Pico Quemado (80) (41°31' S, 71°00' W, 1150 m): MVZ 188732-188734, MVZ 188739-188741; along rimrock, 4 km S and 1 km E Alto del Escorial (79) (41°35' S, 70°45' W, 1150 m): MVZ 188743; laguna Los Juncos, escorial de Chenqueniye, 5 km N Alto del Escorial (79) (41°30' S, 70°46' W, 1150 m): MVZ 188758-188759; N side escorial del Chenqueniye, 4 km N Alto del Escorial (79) (1150 m): MVZ 232412-232413; Ruta Nacional 1s40, 2,5 km N Chenqueniye, bardas volcanicas a 0,5 km N del puesto (79) (41°33' S, 70°40' W): LJAMM 3489-3491; Río Chico (Estación Cerro Mesa) (77) (41°42' S, 70°29' W): LJAMM 3514-3517; Ruta Provincial 6, 2,2 km NE Ojos de Agua (75) (41°32' S, 69°51' W): LJAMM 3531-3533. Bariloche Department: Bariloche (92) (41°09' S, 71°18' W): FML 13072-13073.

Liolaemus goetschi. General Roca Department: 4.5 km E Ruta Provincial 6, 38 km N junction Ruta Nacional 22 (22) (38°42'30.1"S, 67°32'30.9"W): LJAMM 5199-5203. El Cuy Department: El Cuy (62) (39°56' S, 68°20' W): LJAMM 1769; Ruta Provincial 74, 10 km SW Cerro Policía, 35,7 km NE Aguada Guzman (64) (39°45' S, 68°35' W, 608 m): LJAMM 5684.

Liolaemus gracilis. Department Adolfo Alsina: Bahía Creek (4): LJAMM 2535. General Roca Department: 35 km NE Chichinales (17) (38°49' S, 66°47' W): LJAMM 259; 20 km N Cervantes (20): LJAMM 105; 18 km NE Villa Regina (19) (39°02' S, 66°56' W): LJAMM 2411. San Antonio Department: Las Grutas, playa Piedras Coloradas (27) (40°50' S, 65°07' W): LJAMM 2583. El Cuy Department: El Cuy (62) (39°56' S, 68°20' W): LJAMM 1589-1591; Ruta Provincial 71, 41.7 km SW empalme. Ruta Provincial 6 (100) (39°39' S, 68°24' W, 617 m): LJAMM 7114-7115. Valcheta Department: 10,5 km NE Bajo Rico (99) (40°7' S, 66°25' W, 152 m): LJAMM 6289; Valcheta Department: Ruta provincial 62, 4 km N Nahuel Niyeu (108) (40°28' S, 66°32' W, 170 m): LJAMM 8414.

Liolaemus grosseorum. Department General Roca: Ruta Provincial 6, 59 km N General Roca (22) (38°32' S, 67°33' W, 322 m): LJAMM 4462; Ruta hacia Rincón de Los Sauces, a 19,5 km W Peñas Blancas (117) (37°37' S, 68°04' W, 424 m): LJAMM 8753.

Liolaemus inacayali. El Cuy Department: El Cuy (62) (39°56' S, 68°20' W): LJAMM 1776. 25 de Mayo Department: Ingeniero Jacobacci (70) (41°18' S, 69°35' W): FML 08328-08329; laguna Cari Lafquen Chica, 7 km N Ingeniero Jacobacci (70) (41°13' S, 69°24' W): LJAMM 2819; Ruta Nacional 23, 10 km W Ingeniero Jacobacci (70) (41°20' S, 69°41' W): LJAMM 5565; Ruta Provincial 8, 6 km S La Esperanza (61) (40°26' S, 68°28' W): LJAMM 1525; Ruta Provincial 5, 40 km SE Maquinchao (69) (41°39' S, 68°33' W): LJAMM 2816; 7,5 km W Los Menucos, cantera de lajas (60) (40°51' S, 68°10' W): LJAMM 2813; Ruta Nacional 23, 14 km W Aguada de Guerra (67) (41°09' S, 68°30' W): LJAMM 2846; Ruta Provincial 6, 64 km NE Ingeniero Jacobacci (66) (40°53' S, 69°17' W, 854 m): LJAMM 2853; Ruta Nacional 23, cerro frente a estancia Huanuluan, 25,1 km W Ingeniero Jacobacci (74) (41°21' S, 69°48' W): LJAMM 3585. 9 de Julio Department: Ruta Nacional 23, 9 km E Sierra Colorada (53) (40°33' S, 67°39' W): LJAMM 3029; Ruta Provincial 66, 2,5 km W Comico (54) (41°04' S, 67°31' W): LJAMM 2964; Ruta Provincial 5, 7,2 km E de El Cain, cerca de laguna de las Vacas (55) (41°41' S, 68°04' W, 1016 m): LJAMM 6251-6252; Aguada de Guerra, 1 km N pueblo, cerca del hipódromo (118) (41°03' S, 68°22' W, 896 m): LJAMM 8678. Pilcaniyeu Department: Ruta Provincial 67, 3,5 km N Cañadon Chileno (88) (40°51' S, 69°58' W, 1265 m): LJAMM 5627; Ruta Provincial 67, 2 km N Cañadon Chileno, 37 km NE Comallo (88) (40°52' S, 70°01' W, 1230 m): LJAMM 5656. Ñorquinco Department: Ruta Provincial 6, 7 km NE Mamuel Choique (76) (41°42' S, 70°07' W, 1013 m): LJAMM 2174; Ruta Provincial 6, 31 km N Ñorquinco (77) (47°46' S, 70°37' W): LJAMM 2165; Ruta Provincial 6, 10,2 km W entrada a Río Chico (Estación Cerro Mesa) (77) (41°45' S, 70°31' W): LJAMM 3526.

Liolaemus kriegi. El Cuy Department: Ruta Provincial 67, 20 km S Mencue (89) (40°34' S, 69°44' W, 1247 m): LJAMM 5563. 25 de Mayo Department: Ruta Provincial 6, 1 km NW Ojos de Agua (75) (41°32' S, 69°51' W, 1144 m): FML 09322; Ruta Provincial 5, 40 km SE Maquinchao (69) (41°39' S, 68°33' W, 887 m): LJAMM 3082; Ruta Provincial 76, 57 km S Ingeniero Jacobacci (73) (41°45' S, 69°21' W, 1162 m): FML 13077-13080; Ruta Provincial 76, 48 km S Ingeniero Jacobacci (73) (41°42' S, 69°22' W, 1092 m): LJAMM 5544; Ruta Provincial 76, 57 km S empalme Ruta Nacional 23 (73) (41°45' S, 69°21' S.): LJAMM 3565-3568; Ruta Nacional 23, 44 km W

Ingeniero Jacobacci, 10 km E Clemente Onelli (74) (41°16' S, 69°58' W): LJAMM 3593-3595. Ñorquinco Department: Ruta Nacional 40, km 1329, 23 km N El Maitén (78) (41°53' S, 70°59' W, 500 m): LJAMM 2130; along rimrock, 4 km S and 1 km E Alto del Escorial (79) (41°35' S, 70°45' W, 1150 m): MVZ 232440; N side escorial del Chenqueniye, 4 km N Alto del Escorial (79) (1150 m): MVZ 188709; Ruta Nacional 1s40, 2,5 km N Chenqueniye, bardas volcanicas a 0,5 km N del puesto (79) (41°33' S, 70°40' W): LJAMM 3498-3499.

Liolaemus lineomaculatus. Pilcaniyeu Department: Route Provincial 80, 5,5 km E, 8 km S cerro Bernal (92) (1125 m): MVZ 232465-232468. Bariloche Department: 3 km E cerro Blanco (92) (41°15' S, 71°17' W, 1700 m): MVZ 232453-232461; refugio Lynch, filo NE cerro Catedral (93) (41°13' S, 71°30' W, 1750 m): MVZ 232462-232464.

Liolaemus loboii. Bariloche Department: Bariloche (92) (41°09' S, 71°18' W): LJAMM 3092.

Liolaemus melanops. 25 de Mayo Department: Los Menucos (60) (40°50' S, 68°05' W, 232 m): LJAMM 2933; 7,5 km W Los Menucos, cantera de lajas (60) (40°51' S, 68°10' W, 913 m): LJAMM 4767; Ruta Provincial 8, 15,5 km N Los Menucos (60) (40°45' S, 68°13' W, 902 m): LJAMM 3375-3376; . Valcheta Department: camino vecinal, subida a meseta de Somuncurá por puesto Luis Ovejero, a 51,1 km W desde pueblo Arroyo de la Ventana (48) (41°34' S, 66°31' W, 887 m): LJAMM 3270; camino vecinal a 12 km NW Arroyo de la Ventana (48) (41°37' S, 66°11' W, 493 m): LJAMM 3275-3276; camino vecinal, 8,4 km S establecimiento La Polvareda (Valerio Calfin) (48) (41°36' S, 66°26' W, 652 m): LJAMM 3304; Ruta Provincial 60, 1 km W Chipauquil (44) (41°58' S, 66°39' W): BYU 46806; Ruta Provincial 60, 10 km S Chipauquil (45) (41°00' S, 66°44' W): BYU 47307; Ruta Provincial 60, 17 km S Chipauquil (45) (41°03' S, 66°46' W): LJAMM 2951. 9 de Julio Department: Ruta Provincial 66, 2,5 km W Comico (54) (41°04' S, 67°31' W, 877 m): LJAMM 2961; Ruta Nacional 23, 9 km E Sierra Colorada (53) (40°33' S, 67°39' W): BYU 47304-47305.

Liolaemus martorii. Adolfo Alsina Department: Bahía Creek (4): LJAMM 2459. San Antonio Department: Balneario El Salado, Sierra Grande (29) (41°37' S, 65°01' W): LJAMM 2422; 70 km S San Antonio (28): LJAMM 181; Las Grutas, playa Piedras Coloradas (27) (40°50' S, 65°07' W): LJAMM 2560. Valcheta Department: Ruta provincial 62, 4 km N Nahuel Niyeu (108) (40°28'55.3S, 66°32'41.3W, 170 m): LJAMM 8323; Camino vecinal a bajo Santa Rosa, entre Ruta provincial 62 y 63, 3 km SE caserío Santa Rosa (108) (39°58'11.1S, 66°34'13.5W, 130 m): LJAMM 8367.

Liolaemus multimaculatus. Adolfo Alsina Department: Bahía Creek (4): LJAMM 2559; balneario El Condor (La Boca), desembocadura del río Negro (1) (41°01' S, 62°47' W): LJAMM 3700.

Liolaemus petrophilus. 25 de Mayo Department: Ruta Provincial 8, 10,6 km N Los Menucos (60) (40°46' S, 68°10' W, 849 m): LJAMM 3372-3373; Ruta Provincial 8, 24 km NW Los Menucos (59) (40°42' W 68°16' W, 926 m): BYU 47096; Ruta Provincial 6, 1 km NW Ojos de Agua (75) (41°32' S, 69°51' W, 1144 m): LJAMM 2139; Ruta Provincial 8, 17 km S San Antonio del El Cuy (61) (40°17' S, 68°27' W): LJAMM 1652; 7,5 km W Los Menucos, cantera de lajas (60) (40°51' S, 68°10' W, 913 m): BYU 46790; Ruta Provincial 5, 40 km SE Maquinchao (69) (41°39' S, 68°33' W, 887 m): FML 13075; Ingeniero Jacobacci (70) (41°18' S, 69°35' W): LJAMM 270; laguna Carri Lafquen Chica, 7 km N Ingeniero Jacobacci (70) (41°13' S, 69°24' W, 855 m): FML 13078; Ruta Provincial 5, ~50 km NW El Cain (69) (41°30' S, 68°35' W, 955 m): LJAMM 6238-6239. Valcheta Department: extremo de camino vecinal a establecimiento La Polvareda (Valerio Calfin), punta de toma de agua acueducto Sierra Grande (48) (73°54' S, 66°29' W): LJAMM 3231; camino vecinal, subida a Meseta de Somuncurá por puesto Luis Ovejero, a 49,1 km W desde pueblo Arroyo de la Ventana (48) (41°34' S, 66°30' W, 875 m): LJAMM 3254-3255; camino vecinal a Meseta de Somuncurá a 14,5 km NW puesto Luis Ovejero (48) (41°33' S, 66°36' W, 975 m): LJAMM 3314-3315; Ruta Provincial 60, 34,8 km SW puesto policial entrada meseta de Somuncurá (46) (41°10' S, 66°51' W, 970 m): LJAMM 3347; Ruta Provincial 60, 31 km SW puesto policial entrada meseta de Somuncurá (46) (41°08' S, 66°50' W, 922 m): LJAMM 3348-3349; Ruta Provincial 60, 1 km W Chipauquil (44) (41°58' S, 66°39' W): LJAMM 4792; Ruta Provincial 5 y arroyo Verde (50) (41°45' S, 66°30' W, 616 m): FML 13076; meseta de Somuncurá (46) (41°10' S, 66°51' W, 1072 m): LJAMM 4452; laguna Raimunda, Somuncurá (47) (1300 m): MACN 36332; Huayquinao, Somuncurá (47) (900 m): MACN 36333; Aguada del Toro, Meseta de Somuncura (106) (41°17' S, 66°28' W, 840 m): LJAMM 8215.. El Cuy Department: El Cuy (62) (39°56' S, 68°20' W): FML 08574-13081; Cerro Policía, arriba de meseta (64) (39°44' S, 68°28' W, 840 m): LJAMM 6982-6983. Ñorquinco Department: Ruta Provincial 6, 40 km N Ñorquinco (77) (41°45' S, 70°31' W, 887 m): LJAMM 2133; Río Chico (Estación Cerro Mesa) (77) (41°42' S, 70°29' W): LJAMM 3509-3512; Ruta Provincial 6, 10,2 km W entrada a Río Chico

(Estación Cerro Mesa) (77) (41°45' S, 70°31' W): LJAMM 3527-3528; Ruta Provincial 6, 7,4 km W entrada a Río Chico (Estación Cerro Mesa) (77) (41°45' S, 70°29' W): LJAMM 3519-3522. 9 de Julio Department: laguna Blanca, W Chajaijo (47) (41°25' S, 66°57' W, 1411 m): LJAMM 3321; Ruta Provincial 66, 18 km W Comico (54) (41°00' S, 67°40' W, 877 m): LJAMM 4802; Ruta Provincial 5, 7,2 km E de El Cain, cerca de laguna de las Vacas (55) (41°41' S, 68°04' W, 1016 m): LJAMM 6220-6221; Ruta Nacional 23, 38,4 SW Sierra Colorada, 7 km E Los Menucos (60) (40°47' S, 68°02' W, 816 m): LJAMM 3362-3363.

Liolaemus pictus argentinus. Bariloche Department: Bariloche (92) (41°09' S, 71°18' W): BYU 47190-47191; summit cerro Otto, 6 km WSW Bariloche (92) (41°8' S, 71°22' W, 1400 m): MVZ 180073-180075; río Castaño Overo, 44 km W Bariloche (96) (41°38' S, 71°47' W): MVZ 132958-132959, MVZ 164605; 12 km S Bariloche, refugio Neumeyer (92) (41,2400°S, 71,3100°W): MVZ 164604; vicinity refugio Neumeyer, 13 km S Bariloche (92) (41°15' S, 71°18' W, 1500 m): MVZ 180070-180072, MVZ 188828-188829, MVZ 188831; end lago Steffen (95) (41°28' S, 71°34' W, 500 m): MVZ 180083-180086; lago Mascardi (95) (41°21' S, 71°31' W): MVZ 181614; between W end lago Escondido and lago Nahuel Huapi, península Llao Llao (93) (41°02' S, 71°31' W, 770 m): MVZ 186575-186576; Llao-Llao (121): MACN 28599; near Hotel Llao Llao, 24 km ENE Bariloche (92) (41°02' S, 71°33' W, 800 m): MVZ 180076-180077; near Villa Tacul, Llao Llao península, ca. 30 km E Bariloche (93) (41°02' S, 71°33' W, 850 m): MVZ 180078-180081; Hotel Tunquelen, ca. 25 km W Bariloche (93) (41°7' S, 71°35' W): MVZ 186577-186578; 1,5 km N cerro Catedral (93) (41°12' S, 71°30' W, 1700 m): MVZ 188807; shore lago Nahuel Huapi, 0,3 km W Puerto Blest (94) (41°1' S, 71°52' W, 750 m): MVZ 188809-188811; picada aserradero Don Servando, río Manso (92): MACN 13992; El Bolsón (97) (41°58' S, 71°31' W): MACN 14820, 14822-23; Pampa Linda, río Manso superior, cerro Tronador (92): MACN 37273; cerro Piltriquitron cara W, estacionamiento en zona de lanzamiento parapentes, E de El Bolson (105) (41°57' S, 71°28' W, 1200 m): LJAMM 7491.

Liolaemus rothi. Valcheta Department: camino vecinal, subida a meseta de Somuncurá por puesto Luis Ovejero, a 51,1 km W desde pueblo Arroyo de la Ventana (48) (41°34' S, 66°31' W, 887 m): LJAMM 3264-3265; camino vecinal a meseta de Somuncurá a 14,5 km NW puesto Luis Ovejero (48) (41°33' S, 66°36' W, 975 m): LJAMM 3313; Ruta Provincial 60, 28 km SW puesto policial entrada meseta de Somuncurá (46) (41°07' S, 66°49' W, 918 m): LJAMM 3352; meseta de Somuncurá (46) (41°11' S, 66°53' W, 1072 m): LJAMM 4458. 25 de Mayo Department: Ingeniero Jacobacci (70) (41°18' S, 69°35' W): LJAMM 192; Ruta Provincial 76, 48 km S Ingeniero Jacobacci (73) (41°42' S, 69°22' W, 1092 m): LJAMM 5609; Ruta Provincial 76, 57 km S Ingeniero Jacobacci (73) (41°45' S, 69°21' W, 1162 m): LJAMM 3563-3564; Ruta Provincial 8, 17 km S San Antonio del El Cuy (61) (40°17' S, 68°27' W): LJAMM 1526; Ruta Provincial 8, 6 km S La Esperanza (61) (40°26' S, 68°28' W): LJAMM 1851; Ruta Provincial 5, 22 km NW El Cain (57) (41°35' S, 68°22' W, 1165 m): LJAMM 6249; Ruta Provincial 76, 35 km S empalme Ruta Nacional 23, al S Ingeniero Jacobacci (72) (41°34' S, 69°23' W): LJAMM 3554-3556; Ruta Provincial 76, 49,5 km S empalme Ruta Nacional 23 (73) (41°41' S, 69°23' W): LJAMM 3559; Ruta Nacional 23, cerro frente a estancia Huanuluan, 25,1 km W Ingeniero Jacobacci (74) (41°21' S, 69°48' W): LJAMM 3584. El Cuy Department: Ruta provincial 74, 20 km SW Aguada Guzman (103) (40°07' S, 68°56' W, 935 m): LJAMM 7023; Ruta Provincial 74, paraje Chasico (puesto abandonado), 4 km N cruce Rutas Provincial 6 y 67 (104) (40°17' S, 68°58' W, 988 m): LJAMM 7069; Ruta Provincial 67, 19,2 km NE Mencue (90) (40°19' S, 69°26' W, 1094 m): LJAMM 5542; Ruta Provincial 67, 20 km S Mencue (89) (40°34' S, 69°44' W, 1247 m): LJAMM 5554. Pilcaniyeu Department: Ruta Provincial 67, 3,5 km N Cañadon Chileno (88) (40°51' S, 69°58' W, 1265 m): LJAMM 5608; Ruta Provincial 67, 2 km N Cañadon Chileno, 37 km NE Comallo (88) (40°52' S, 70°01' W, 1230 m): LJAMM 4987; Ruta Nacional 40, cerro Alto (85) (40°46' S, 70°34' W, 1203 m): LJAMM 8683. Ñorquinco Department: Ruta Provincial 6, 31 km N Ñorquinco (77) (47°46' S, 70°37' W): LJAMM 2163; Ruta Provincial 6, 1 km NW Ojos de Agua (75) (41°32' S, 69°51' W, 1144 m): LJAMM 2135; Ruta Provincial 6, 10,2 km W entrada a Río Chico (Estación Cerro Mesa) (77) (41°45' S, 70°31' W): LJAMM 3523-3525. 9 de Julio Department: Ruta Nacional 23, 38,4 SW Sierra Colorada, 7 km E Los Menucos (60) (40°47' S, 68°02' W, 816 m): LJAMM 3370-3371.

Liolaemus shitan. El Cuy Department: Ruta provincial 74, 20 km SW Aguada Guzman (103) (40°07' S, 68°56' W, 935 m): LJAMM 7024-7025; Ruta Provincial 74, paraje Chasico (puesto abandonado), 4 km N cruce Rutas Provincial 6 y 67 (104) (40°17' S, 68°58' W, 988 m): LJAMM 7070-7071. 25 de Mayo Department: Ruta Provincial 8, 17 km S San Antonio del El Cuy (61) (40°17' S, 68°27' W): LJAMM 1518-1522, FML 08573; Ruta Provincial 8, 6 km S La Esperanza (61) (40°26' S, 68°28' W): LJAMM 1759; Provincial Road 8, 81.4 km N Los Menucos, 18 km S San Antonio del Cuy, Las Piedras Blancas ranch (61) (40°17' S, 68°27' W, 1011 m):

LJAMM 6792-6797.

Liolaemus somuncurae. Valcheta Department: 65,6 km destacamento policial El Rincon, entre cerro Corona Grande y cerro Corona Chico (47) (41°23' S, 66°57' W, 1425 m): LJAMM 6764-6765. 25 de Mayo Department: Ruta Provincial 76, 35 km S empalme Ruta Nacional 23, al S de Ingeniero Jacobacci (72) (41°34' S, 69°23' W): LJAMM 3661-3663.

Liolaemus tehuelche. Pilcaniyeu Department: Ruta Nacional 40, 2,7 km S estancia San Pedro (84) (40°52' S, 70°34' W, 1096 m): LJAMM 5459.

Liolaemus telsen. Valcheta Department: 65,6 km destacamento policial El Rincon, entre cerro Corona Grande y cerro Corona Chico (47) (41°23' S, 66°57' W, 1425 m): LJAMM 6837.

Liolaemus wiegmanni. Adolfo Alsina Department: alrededor de reserva provincial La Lobería, 64 km S Viedma (3) (41°09' S, 63°09' W): FML 13714.

Phymaturus agilis. 25 de Mayo Department: Ruta Provincial 6, 17.4 km NE Ojos de Agua, 28 km SW Ingeniero Jacobacci (70) (41°26' S, 69°46' W, 1014 m).

Phymaturus ceii. 25 de Mayo Department: Ruta Provincial 8, 17 km S San Antonio del El Cuy (61) (40°17' S, 68°27' W): FML 08394-08395. El Cuy Deparment: Ruta Provincial 67, 19,2 km NE Mencue (90) (40°19' S, 69°26' W, 1094 m): LJAMM 5541; Ruta Provincial 67, 20 km S Mencue (89) (40°34' S, 69°44' W, 1247 m): LJAMM 5548.

Phymaturus etheridgei. 25 de Mayo Department: Ruta Provincial 76, 57 km S Ingeniero Jacobacci (41°45' S, 69°21' W, 1162 m): LJAMM 6548-6549.

Phymaturus excelsus. Ñorquinco Department: Ruta Provincial 6, 2,2 km NE Ojos de Agua (75) (41°32' S, 69°51' W): LJAMM 3534-3535.

Phymaturus somuncurensis. Valcheta Department: meseta de Somuncurá (46) (41°11' S, 66°53' W, 1002 m): LJAMM 4454; 67 km N casco estancia Cecchi, Somuncurá (51): MACN 37431-35; extremo de camino vecinal a establecimiento La Polvareda (Valerio Calfin), punta de toma de agua acueducto Sierra Grande (48) (41°33' S, 66°29' W, 735 m): LJAMM 3233-3234; camino vecinal, subida a meseta de Somuncurá por puesto Luis Ovejero (48) (41°34' S, 66°29' W, 808 m): LJAMM 3237-3238; camino vecinal hacia estancia Cecchi, campo de Sebastián Andenao, 24,8 km W Arroyo Los Berros (49) (41°28' S, 66°19' W, 723 m): LJAMM 3317-3318; laguna Raimunda, Somuncurá (47): MACN 37436-40.

Phymaturus spectabilis. 25 de Mayo Department: Ruta Provincial 6, 17,4 km NE Ojos de Agua, 28 km SW Ingeniero Jacobacci (75) (41°26' S, 69°46' W): LJAMM 3600-3601.

Phymaturus spurcus. 25 de Mayo Department: Ruta Nacional 23, cerro frente a estancia Huanuluan, 25,1 km W Ingeniero Jacobacci (74) (41°21' S, 69°48' W): LJAMM 3629-3630. Ñorquinco Department: Ruta Nacional 1s40, 2,5 km N Chenqueniye, bardas volcanicas a 0,5 km N del puesto (79) (41°33' S, 70°40' W): LJAMM 3504-3505; Ruta Provincial 6, 2,2 km NE Ojos de Agua (75) (41°32' S, 69°51' W): LJAMM 3536.

Phymaturus tenebrosus. Pilcaniyeu Department: Ruta Nacional 40, 2,7 km S estancia San Pedro (84) (40°52' S, 70°34' W, 1096 m): LJAMM 4453; Ruta Nacional 40, cerro Alto (85) (40°46' S, 70°34' W, 1203 m): LJAMM 8681.

Diplolaemus darwinii. Ñorquinco Department: Ruta Nacional 1s40, 6.2 km N empalme Ruta Provincial 6, cerca de entrada a Estancia Fitalacao (79) (41°45' S, 70°48' W, 1080 m): LJAMM 3487; Ruta Nacional 1s40, 9.8 km N empalme Ruta Provincial 6 (79) (41°43' S, 70°48' W, 1203 m): LJAMM 3488.

Diplolaemus sexcinctus. Valcheta Department: camino vecinal, subida a meseta de Somuncurá por puesto Luis Ovejero, a 51,1 km W desde pueblo Arroyo de la Ventana (48) (41°34' S, 66°31' W, 887 m): LJAMM 3268-3269; camino vecinal a meseta de Somuncurá a 14,5 km NW puesto Luis Ovejero (48) (41°33' S, 66°36' W, 975 m): LJAMM 3309-3310. 25 de Mayo Department: Ruta Provincial 5, 40 km SE Maquinchao (69) (41°39' S, 68°33' W, 887 m): MLPS 2582; 7,5 km W Los Menucos, cantera de lajas (60) (40°51' S, 68°10' W, 913 m): BYU 46779; Ruta Provincial 5, 22 km NW El Cain (57) (41°35' S, 68°22' W, 1165 m): LJAMM 6250; Ruta Provincial 72, 3 km W Puesto de Hornos (Seccional de Maquinchao SA, Apestegui) y Arroyo Maquinchao, 19,3 km W empalme ruta Maquinchao-El Cain (58) (41°38' S, 68°42' W, 995 m): LJAMM 6255; Ruta Provincial 76, 23,5 km S empalme Ruta Nacional 23, al S Ingeniero Jacobacci (72)

(41°29’ S, 69°25’ W): LJAMM 3549-3550; Ruta Provincial 76, 35 km S empalme Ruta Nacional 23, al S Ingeniero Jacobacci (72) (41°34’ S, 69°23’ W): LJAMM 3551-3553. Pilcaniyeu Department: Route Provincial 40, 23 km NNW Las Bayas (81) (41°15’ S, 70°40’ W, 950 m): MVZ 232237-232238, Route 40, ca. 15 km S Pilcaniyeu viejo (83) (41°4’ S, 70°32’ W, 900 m): MVZ 188875; 17 km NE Pilcaniyeu, INTA Experimental Station (83) (41°1’ S, 70°28’ W, 1100 m): MVZ 191629. Ñorquinco Department: Flatland, 3 km S and 1 km E Alto del Escorial (79) (41°34’ S, 70°45’ W, 1150 m): MVZ 188879-188880. Bariloche Department: Bariloche (92) (41°09’ S, 71°18’ W): LJAMM 3088; 4 km SE Bariloche (92) (41°08’ S, 71°16’ W): MVZ172246-172247, MVZ 180039; 3,5 km SE Bariloche (92) (41°08’ S, 71°17’ W): MVZ 172248; Summit Cerro Otto, 6 km WSW Bariloche (92) (41°8’ S, 71°22’ W, 1400 m): MVZ 180049-180050.

Leiosaurus bellii. Adolfo Alsina Department: Bahía Creek (4): LJAMM 2452. General Roca Department: 35 km NE Chichinales (17) (38°49’ S, 66°47’ W): FML 08324; Peñas Blancas (24) (37°42’ S, 67°52’ W): LJAMM 2397; 5 km N General Enrique Godoy (20): LJAMM 2450. El Cuy Department: Ruta Provincial 74 (camino a Renteria), 34,3 km N empalme Ruta Provincial 71 (101) (39°24’ S, 68°27’ W, 848 m): LJAMM 7112; El Cuy (62) (39°56’ S, 68°20’ W): LJAMM 1715. San Antonio Department: Las Grutas (27) (40°44’ S, 64°56’ W): LJAMM 4466; San Antonio Depto: Ruta Nacional 3, Km 1220, 43 km N Sierra Grande (111) (41°13’41.6’’S, 65°22’40.6’’W, 196 m): LJAMM 8458. Valcheta Department: Ruta Provincial 60, 18 km SW puesto policial entrada meseta de Somuncurá (45) (41°03’ S, 66°47’ W, 784 m): LJAMM 3354; Ruta Provincial 60, 10 km S Chipauquil (45) (41°00’ S, 66°44’ W): MLPS 2583; Huayquinao, Somuncurá (47) (850 m): MACN 36732; Ruta provincial 63, 11,3 km W empalme de camino vecinal y vado por cañadon (109) (39°54’ S, 66°59’ W, 212 m): LJAMM 8438. 25 de Mayo Department: 7,5 km W Los Menucos, cantera de lajas (60) (40°51’ S, 68°10’ W, 913 m): BYU 46721; Ruta Nacional 23, 14 km W Aguada de Guerra (67) (41°09’ S, 68°30’ W, 866 m): BYU 46720; Ingeniero Jacobacci (70) (41°18’ S, 69°35’ W): LJAMM 189; Huanu Luan (94) (41°21’ S, 69°52’ W): MVZ 6174.

Pristidactylus nigroiugulus. 25 de Mayo Department: Ruta Provincial 5, 40 km SE Maquinchao (69) (41°39’ S, 68°33’ W, 887 m): LJAMM 3089; Ruta Nacional 23, 14 km W Aguada de Guerra (67) (41°09’ S, 68°30’ W, 866 m): LJAMM 3090; Ruta Provincial 5, 8,9 km SE El Cain (55) (41°41’ S, 69°03’ W).

Pristidactylus fasciatus. General Roca Department: 35 km NE Chichinales (17) (38°49’ S, 66°47’ W): FML 09319.

Stenocercus pectinatus. Adolfo Alsina Department: alrededor de reserva provincial La Lobería, 64 km S Viedma (3) (41°09’ S, 63°09’ W): LJAMM 5864. Avellaneda Department: Chimpay (10) (39°03’ S, 66°18’ W): LJAMM 1653. Pichi Mahuida Department: Ruta Nacional 251, 74,5 km S Río Colorado (107) (39°43’ S, 64°26’ W, 118 m): LJAMM 8457.

Homonota darwini. Adolfo Alsina Department: Bahía Creek (4): FML 08302-08303. Avellaneda Department: Ruta Provincial 4, 48 km S empalme Ruta Nacional 250 (36) (39°53’ S, 65°52’ W): BYU 46069. El Cuy Department: Ruta Provincial 71, 41,7 km SW empalme Ruta Provincial 6 (100) (39°39’ S, 68°24’ W, 617 m): LJAMM 6964-6965; Cerro Policía, arriba de meseta (64) (39°44’ S, 68°28’ W, 840 m): LJAMM 6970; Ruta Provincial 67, 37,9 km SW empalme Ruta Provincial 6 y Ruta Provincial 74 (90) (40°18’ S, 69°22’ W, 1148 m): LJAMM 6972-6973; Ruta Provincial 67, 20 km S Mencue (89) (40°34’ S, 69°44’ W, 1247 m): LJAMM 5558. San Antonio Department: Sierra Grande (30) (41°38’ S, 65°26’ W): LJAMM 4486; Las Grutas (27) (40°44’ S, 64°56’ W): LJAMM 4483; sierras de

Pailleman, camino de unión entre Ruta Provincial 61 y 58, 26 km NW Mina Gonzalito (33) (41°12’ S, 65°54’ W, 391 m): LJAMM 4733. Valcheta Department: Ruta Provincial 60, 10 km S Chipauquil (45) (41°00’ S, 66°44’ W): BYU 46794; Ruta Provincial 60, 17 km S Chipauquil (45) (41°03’ S, 66°46’ W): LJAMM (fn) 0305; Aguada del Toro, Meseta de Somuncura (106) (41°17’ S, 66°28’ W, 840 m): LJAMM 8207. 9 de Julio Department: camino a Rincon Grande, 24 km W Cona Niyeu (52) (41°49’ S, 67°10’ W, 624 m): LJAMM 3281-3282; Sierra Colorada (53) (40°35’ S, 67°45’ W): BYU 46796. 25 de Mayo Department: Ruta Provincial 8, 17 km S San Antonio del El Cuy (61) (40°17’ S, 68°27’ W): FML 08576; Ruta Provincial 8, 6 km S La Esperanza (61) (40°26’ S, 68°28’ W): LJAMM 1619; sierras de Atralco (71): FML 08402-08403; 7,5 km W Los Menucos, cantera de lajas (60) (40°51’ S, 68°10’ W, 913 m): MLPS 2580; Ruta Provincial 76, 57 km S empalme Ruta Nacional 23 (73) (41°45’ S, 69°21’ W): LJAMM 3561-3562; Ruta Provincial 6, 17,4 km NE Ojos de Agua, 28 km SW Ingeniero Jacobacci (75) (41°26’ S, 69°46’ W): LJAMM 3665. Ñorquinco Department: Ruta Nacional 1s40, 2,5 km N Chenqueniye, bardas volcánicas a 0,5 km N del puesto (79) (41°33’ S, 70°40’ W): LJAMM 3502; Ruta Provincial 6, 2,2 km NE Ojos de Agua (75) (41°32’ S, 69°51’ W): LJAMM 3699. Pilcaniyeu Departmen: Ruta Nacional 40, 2,7 km S estancia San Pedro (84) (40°52’ S, 70°34’ W, 1096 m): LJAMM 5422; Ruta Nacional 40, cerro Alto (85) (40°46’ S, 70°34’ W, 1203 m): LJAMM 8600.

Homonota underwoodi. General Roca Department: Villa Regina (19): MLPS 2575-2585; 20 km N Cervantes (20): FML 08315. Avellaneda Department: Chimpay (10) (39°03’ S, 66°18’ W): FML 08300-08301; Chelforo (12) (39°05’ S, 66°32’ W): FML 08296-08297.

Homonota fasciata. Department Avellaneda: Chimpay (10) (39°03’ S, 66°18’ W): FML 08293-08299; orilla norte río Negro, 19,2 km W Colonia Josefa, 42,8 km E Choele Choel (7) (39°29’ S, 65°30’ W, 119 m): LJAMM 4814; orilla norte río Negro, Colonia Josefa (6) (39°36’ S, 65°26’ W, 113 m): LJAMM 4815; Ruta provincial 66, cerro Mesa, 75,9 km S Villa Regina (15) (39°46’ S, 67°16’ W): LJAMM 6963. General Roca Department: Villa Regina (19) (39°06’ S, 67°05’ W): LJAMM 4490; 35 km NE Chichinales (17) (38°49’ S, 66°47’ W): LJAMM 94.

Cnemidophorus longicaudus. Avellaneda Department: Chimpay (10) (39°03’ S, 66°18’ W): FML 08413-08414; Chelforo (12) (39°05’ S, 66°32’ W): LJAMM 21; orilla sur río Colorado, 56 km W Pichi Mahuida (9) (38°49’ S, 65°25’ W): LJAMM 4539; Ruta Provincial 66, cerro Mesa, 75,9 km S Villa Regina (15) (39°46’ S, 67°16’ W): LJAMM 3637; Ruta provincial 66, 9,4 km N empalme Ruta provincial 63, cerro Mesa (113) (39°47’ S, 67°15’ W, 275 m): LJAMM 8304. General Roca Department: Villa Regina (19) (39°06’ S, 67°05’ W): LJAMM 5863; Ruta hacia Rincón de Los Sauces, a 19,5 km W Peñas Blancas (117) (37°37’ S, 68°04’ W, 424 m): LJAMM 8751. Valcheta Department: 10,5 km NE Bajo Rico (99) (40°7’ S, 66°25’ W, 152 m): LJAMM 7081-7082; Ruta Provincial 4, 84 km S junction Ruta Nacional 250, extremo W Gran Bajo del Gualicho (37) (40°06’ S, 66°00’ W): MLPS 2578; Ruta Provincial 4, laguna del Indio Muerto (39) (40°24’ S, 66°02’ W): MLPS 2579; Camino vecinal a bajo Santa Rosa, entre Ruta provincial 62 y 63, 3 km SE caserío Santa Rosa (108) (39°58’ S, 66°34’ W, 130 m): LJAMM 8315; Camino vecinal que conecta Ruta provincial 62 y 63, 74 km N Nahuel Niyeu, NW estancia Las Chilcas, camino bajo Santa Rosa (108) (40°00’ S, 66°32’ W, 158 m): LJAMM 8316. 9 de Julio Department: Ruta provincial 63, 11,3 km W empalme de camino vecinal y vado por cañadon (109) (39°54’ S, 66°59’ W, 212 m): LJAMM 8309. San Antonio Department: Las Grutas (27) (40°44’ S, 64°56’ W): LJAMM 4541; Camino vecinal a 20 km W San Antonio Oeste (110) (40°37’ S 65°10’ W, 100 m): LJAMM 8301.

APPENDIX 2. Localities mentioned in this work.

MARKED POINTS	COLLECTION SITES	DEPARTAMENT	COORDINATES	ELEVATION
1	El Condor Beach (La Boca), mouth of Negro River	Adolfo Alsina	41°01' S, 62°47' W	0
2	La Loberia Reserve, 30 km S Viedma	Adolfo Alsina	41°09' S, 63°07' W	43
3	Around of La Lobería Reserve, 64 km S Viedma	Adolfo Alsina	41°09' S, 63°09' W	50
4	Bahía Creek	Adolfo Alsina	40°47' S, 63°00' W	16
5	Caleta de Los Loros	Adolfo Alsina	41°01' S, 64°06' W	30
6	Colonia Josefa	Avellaneda	39°36' S, 65°26' W	113
7	National Road 250, 19.2 km NW Colonia Josefa, 42.8 km SE Choele Choel	Avellaneda	39°29' S, 65°30' W	119
8	Choele Choel	Avellaneda	39°17' S, 65°39' W	113
9	Colorado River, 56 km W Pichi Mahuida	Avellaneda	38°49' S, 65°25' W	170
10	Chimpay	Avellaneda	39°03' S, 66°18' W	168
11	National Road 22, between Chelforo and Chimpay	Avellaneda	39°05' S, 66°19' W	164

APPENDIX 2. CONTINUED.

MARKED POINTS	COLLECTION SITES	DEPARTAMENT	COORDINATES	ELEVATION
12	Chelforo	Avellaneda.	39°05' S, 66°32' W	176
13	National Road 22, between Chichinales and Chelforo	Gral. Roca	39°03' S, 66°44' W	291
14	Provincial Road 66, 48.8 km S Villa Regina	Avellaneda	39°32' S, 67°10' W	104
15	Provincial Road 66, 74 km S Villa Regina	Avellaneda	39°45' S, 67°14' W	228
15	Provincial Road 66, Mesa Hill, 75.9 km S Villa Regina	Avellaneda	39°46' S, 67°16' W	295
16	Chichinales	Gral. Roca	39°06' S, 66°56' W	198
17	Minor road, 20 km NE Chichinales	Gral. Roca	39°02' S, 66°45' W	317
17	Minor road, 35 km NE Chichinales	Gral. Roca	38°49' S, 66°47' W	288
18	Minor road, 18 km NE Villa Regina	Gral. Roca	39°02' S, 66°56' W	310
19	Villa Regina	Gral. Roca	39°06' S, 67°05' W	218
20	Minor road, 5 km N General Enrique Godoy	Gral. Roca	39°02' S, 67°09' W	303
20	Minor road, 20 km N Cervantes	Gral. Roca	38°53' S, 67°15' W	309
21	Laguna Playa, Fuerte General Roca	Gral. Roca	39°01' S, 67°37' W	261
21	4.5 km E Ruta Provincial 6, 38 km N junction Ruta Nacional 22	Gral. Roca	38°42' S, 67°32' W	Unknown
22	Provincial Road 6, 59 km N General Roca	Gral. Roca	38°32' S, 67°33' W	322
23	National Road 151, km 53	Gral. Roca	38°31' S, 68°04' W	409
24	National Road 151, 5 km N of Catriel	Gral. Roca	37°52' S, 67°48' W	319
24	National Road 151, km 144 (near of Catriel)	Gral. Roca	37°47' S, 67°44' W	350
24	Peñas Blancas	Gral. Roca	37°42' S, 67°52' W	386
25	Allen	Gral. Roca	38°55' S, 67°48' W	255
26	San Antonio Oeste	San Antonio	40°44' S, 54°57' W	11
27	Las Grutas, Piedras Coloradas Beach	San Antonio	40°50' S, 65°07' W	
27	Las Grutas	San Antonio	40°48' S, 65° 05' W	11
27	Between Las Grutas and Piedras Coloradas Beach	San Antonio	40°50' S, 65°06' W	1
28	National Road 1, 70 km S San Antonio Oeste	San Antonio	41°08' S, 65°19' W	154
29	El Salado Beach, Sierra Grande	San Antonio	41°37' S, 65°01' W	6
30	Sierra Grande	San Antonio	41°38' S, 65°26' W	281
31	Nacional Road 3 junction Provincial Road 61 to Mina Gonzalito	San Antonio	41°09' S, 65°23' W	190
32	Provincial Road 61, 25 km SW junction Nacional Road 3	San Antonio	41°17' S, 65°35' W	228
33	Paileman Mountains, road of junction between Provincial Road 61 and Provincial Road 58, 26 km NW Mina Gonzalito	Valcheta	41°12' S, 65°54' W	391
34	Provincial Road 58, 8 km N Paileman Mountains	Valcheta	41°04' S, 65°53' W	316
35	Provincial Road 58, La Calera	Valcheta	40°52' S, 65°47' W	239
36	Provincial Road 4, 48 km S junction National Road 250	Avellaneda	39°53' S, 65°52' W	115
37	Provincial Road 4, 84 km S junction National Road 250, W edge Gran Bajo del Gualicho	Valcheta	40°06' S, 66°00' W	192
38	Gran Bajo del Gualicho	Valcheta	40°13' S, 65°44' W	7
39	Provincial Road 4, Laguna del Indio Muerto	Valcheta	40°24' S, 66°02' W	130
40	Provincial Road 4, arriving to Valcheta	Valcheta	40°38' S, 66°09' W	170
41	National Road 23, Nahuel Niyeu Station	Valcheta	40°30' S, 66°32' W	170
41	National Road 23, 14 km W Nahuel Niyeu	Valcheta	40°29' S, 66°43' W	223
42	National Road 23, 23 km W Nahuel Niyeu, Yaminue Stream	Valcheta	40°29' S, 67°39' W	677
43	Provincial Road 60, 30 km SW Valcheta, 29.4 km NW Chipauquil	Valcheta	40°47' S, 66°27' W	315
44	Provincial Road 60, 1 km N Chipauquil	Valcheta	40°56' S, 66°38' W	462
44	Minor road, 1 km W Chipauquil	Valcheta	40°58' S, 66°39' W	479
44	Somuncurá Plateau, El Rincón	Valcheta	40°59' S, 66°40' W	620
44	Somuncurá Plateau, Arroyo Ventana, Rincón Ranch	Valcheta	40°59' S, 66°40' W	620
45	Provincial Road 60, 10 km S Chipauquil	Valcheta	41°00' S, 66°44' W	689
45	Provincial Road 60, 17 km S Chipauquil	Valcheta	41°03' S, 66°46' W	747
45	Provincial Road 60, 18 km SW Police Post entrance to Somuncura Plateau	Valcheta	41°03' S, 66°47' W	784
46	Provincial Road 60, 28 km SW Police Post entrance to Somuncura Plateau	Valcheta	41°07' S, 66°49' W	918
46	Provincial Road 60, 31 km SW Police Post entrance to Somuncura Plateau	Valcheta	41°08' S, 66°50' W	922
46	Provincial Road 60, 34.8 km SW Police Post entrance to Somuncura Plateau	Valcheta	41°10' S, 66°51' W	970
46	Somuncura Plateau, Road between El Rincón and Raimunda Lake	Valcheta	Unknown	1200-1400
46	Somuncura Plateau	Valcheta	41°10' S, 66°51' W	1072

APPENDIX 2. CONTINUED.

MARKED POINTS	COLLECTION SITES	DEPARTAMENT	COORDINATES	ELEVATION
46	Somuncura Plateau	Valcheta	41°11' S, 66°53' W	1072
47	Minor road, 65.6 km Police Post El Rincon, near to Corona Hill, between Corona Grande Hill and Corona Chico Hill	9 de Julio	41°23' S, 66°57' W	1425
47	Somuncura Plateau, Huayquinao	Valcheta	Unknown	900
47	Somuncura Plateau, La Chiara Lake and Raimunda Lake	Valcheta	41°14' S, 67°20' W	Unknown
47	Somuncura Plateau, Raimunda Lake	Valcheta	41°21' S, 66°58' W	1400
47	Somuncura Plateau, Paraguay Lake	Valcheta	41°22' S, 66°55' W	1346
47	Somuncura Plateau, Merlo Hill	Valcheta	Unknown	1200
47	Somuncura Plateau, Corona Hill	Valcheta	41°23' S, 66°57' W	1425
47	Somuncura Plateau, Corona Chico Hill	Valcheta	41°25' S, 66°57' W	1350
47	Somuncura, Plateau, Miñuelo Lake	Valcheta	Unknown	1400
47	Somuncura Plateau, Cortaderas	Valcheta	Unknown	1100
47	Somuncura Plateau, Blanca Lake, W Chajaijo	Valcheta	41°25' S, 66°57' W	1411
48	Minor road to Somuncura Plateau, to 49.1 km W from Arroyo Ventana	Valcheta	41°34' S, 66°30' W	875
48	Minor road to Somuncura Plateau, to 51.1 km W from Arroyo Ventana	Valcheta	41°34' S, 66°31' W	887
48	Minor Road to Somuncura Plateau to 14.5 km NW Puesto Luis Ovejero	Valcheta	41°33' S, 66°36' W	975
48	Minor road, rise to Somunucura Plateau near Puesto Luis Ovejero	Valcheta	41°34' S, 66°29' W	808
48	La Polvareda Establishment	Valcheta	41°33' S, 66°29' W	735
48	Minor road, 8.4 km S La Polvareda Establishment	Valcheta	41°36' S, 66°26' W	652
48	Minor road, along Aqueduct to Sierra Grande	Valcheta	41°40' S, 66°20' W	563
48	Puesto Luis Ovejero	Valcheta	41°34' S, 66°28' W	779
48	Minor road to 12 km NW Arroyo Ventana	Valcheta	41°37' S, 66°11' W	493
48	Provincial Road 5, 20 km W Arroyo Ventana	Valcheta	41°43' S, 66°18' W	726
49	Minor road to Somuncura Plateau, 18.4 km W Arroyo Los Berros	Valcheta	41°28' S, 66°15' W	547
49	Minor road to Cecchi Farm, 24.8 km W Arroyo Los Berros	Valcheta	41°28' S, 66°19' W	723
50	Junction Provincial Road 5 and Arroyo Verde	Valcheta	41°45' S, 66°30' W	617
51	Somuncura Plateau, 67 km N Cecchi Ranch	Valcheta	Unknown	Unknown
52	Minor road to Rincon Grande, 24 km W Cona Niyeu	9 de Julio	41°49' S, 67°10' W	624
53	National Road 23, 9 km E Colorada Mountains	9 de Julio	40°33' S, 67°39' W	629
53	Colorada Mountains	9 de Julio	40°35' S, 67°45' W	664
54	Provincial Road 66, 18 km W Comico	9 de Julio	41°00' S, 67°40' W	877
54	Provincial Road 66, 2,5 km W Comico	9 de Julio	41°04' S, 67°31' W	877
55	Provincial Road 5, 7.2 km E to El Cain, near of Laguna de las Vacas	9 de Julio	41°41' S, 68°04' W	1016
55	Provincial Road 5, 8.9 km SE El Cain	25 de mayo	41°41' S, 68°03' W	1009
56	Provincial Road 8, 17.9 km N limit between Chubut-Rio Negro Provinces	25 de Mayo	41°51' S, 68°04' W	1111
57	Provincial Road 5, 22 km NW El Cain	25 de Mayo	41°35' S, 68°22' W	1165
58	Provincial Road 72, 3 km W Puesto de Hornos and Arroyo Maquinchao, 19.3 km W junction road to Maquinchao - El Cain	25 de Mayo	41°38' S, 68°42' W	995
59	Provincial Road 8, 24 km NW Los Menucos	25 de Mayo	40°42' S, 68°16' W	926
60	Los Menucos	25 de Mayo	40°50' S, 68°05' W	232
60	7.5 km W Los Menucos	25 de Mayo	40°51' S, 68°10' W	913
60	National Road 23, 38.4 SW Colorada Mountain, 7 km E Los Menucos	9 de Julio	40°47' S, 68°02' W	816
60	Provincial Road 8, 10.6 km N Los Menucos	25 de Mayo	40°46' S, 68°10' W	849
60	Provincial Road 8, 15.5 km N Los Menucos	25 de Mayo	40°45' S, 68°13' W	902
61	Provincial Road 8, 17 km S San Antonio del Cuy	25 de Mayo	40°17' S, 68°27' W	1108
61	Provincial Road 8, 81.4 km N Los Menucos, 18 km S San Antonio del Cuy, Las Piedras Blancas ranch	25 de mayo	40°17' S 68°27' W	1011
61	Over Provincial Route 6, 175 km General Roca	25 de mayo	40°17' S, 68° 27' W	820
61	Provincial Road 68, 77 km NW Colorada Mountain	25 de mayo	40°26' S, 68°22' W	1037
61	Provincial Road 8, 6 km S La Esperanza	25 de Mayo	40°26' S, 68°28' W	1090
62	El Cuy	El Cuy	39°56' S, 68°20' W	727
63	Provincial Road 8, 26 km NE El Cuy	El Cuy	39°44' S, 68°11' W	578
64	Provincial Road 74, 10 km SW Cerro Policía, 35.7 km NE Aguada Guzman	El Cuy	39°45' S, 68°35' W	608
64	Cerro Policia	El Cuy	39°44' S, 68°28' W	840
64	town of Cerro Policia, near the entrance to a private residence	El Cuy	39°43' S, 68°32' W	640

APPENDIX 2. CONTINUED.

MARKED POINTS	COLLECTION SITES	DEPARTAMENT	COORDINATES	ELEVATION
65	Provincial Road 71, 33.5 km NE Cerro Policía	El Cuy	39°36' S, 68°09' W	541
66	Provincial Road 6, 64 km NE Ingeniero Jacobacci	25 de Mayo	40°53' S, 69°17' W	854
67	National Road 23, 14 km W Aguada de Guerra	25 de Mayo	41°09' S, 68°30' W	866
68	Provincial Road 23, km 33, 9.1 km E Maquinchao	25 de Mayo	41°12' S, 68°35' W	904
69	Provincial Road 5, 40 km SE Maquinchao	25 de Mayo	41°39' S, 68°33' W	887
69	Provincial Road 5, ~50 km NW El Cain	25 de Mayo	41°30' S, 68°35' W	955
70	Ingeniero Jacobacci	25 de Mayo	41°18' S, 69°35' W	944
70	South Plateau Ingeniero Jacobacci	25 de Mayo	41°20' S, 69°33' W	1100
70	Cari Laufquen Chica Lake, 7 km N Ingeniero Jacobacci	25 de Mayo	41°13' S, 69°24' W	855
70	Cari Laufquen Grande Lake, 17 km Ingeniero Jacobacci	25 de Mayo	41°23' S, 68°18' W	1000
70	Laguna Cari Lafquen Chica and Ruta Provincial 6, 10 km N junction Ruta Nacional 23	25 de Mayo	41°13' S, 69°24' W	834
70	National Road 23, 10 km W Ingeniero Jacobacci	25 de Mayo	41°20' S, 69°41' W	930
70	Provincial Road 6, near Ingeniero Jacobacci	25 de Mayo	41° 25' S, 69°45' W	1030
70	Provincial Road 76, 2.3 km S junction Provincial Road 76 and Provincial Road 23, 3.4 km S Ingeniero Jacobacci	25 de Mayo	41°20' S, 69°28' W	898
71	Atralco Mountains	25 de Mayo	41°27' S, 69°37' W	Unknown
72	National Road 23, 19 km of Ingeniero Jacobacci	25 de Mayo	41°21' S, 69°46' W	Unknown
72	National Road 23, 22.3 km E Ingeniero Jacobacci	25 de Mayo	41°18' S, 69°17' W	860
72	Provincial Road 6, 28 km S of Ingeniero Jacobacci	25 de Mayo	41°27' S, 69°46' W	Unknown
72	Provincial Road 76, 23.5 km S junction National Road 23, S of Ingeniero Jacobacci	25 de Mayo	41°29' S, 69°25' W	933
72	Provincial Road 76, 35 km S junction National Road 23, S of Ingeniero Jacobacci	25 de Mayo	41°34' S, 69°23' W	984
72	Between Ingeniero Jacobacci and Molihue, provincial road 76	25 de Mayo	41°34' S, 69°23' W	818
73	Provincial Road 76, 49.5 km S junction National Road 23	25 de Mayo	41°41' S, 69°23' W	1101
73	Provincial Road 76, 48 km S Ingeniero Jacobacci	25 de Mayo	41°42' S, 69°22' W	1092
73	Provincial Road 76, 57 km S Ingeniero Jacobacci	25 de Mayo	41°45' S, 69°21' W	1162
73	Provincial Road 76, 57 km S junction National Road 23	25 de Mayo	41°45' S, 69°21' W	1158
73	Añueque Mountains, 5 km of Moligue	25 de Mayo	41°52' S, 69°27' W	1400
73	43 km N of Moligüe	25 de Mayo	41°35' S, 69°22' W	1011
74	Huanuluan	25 de Mayo	41°21' S, 69°52' W	942
74	National Road 23, 25.1 km W Ingeniero Jacobacci	25 de Mayo	41°21' S, 69°48' W	942
74	National Road 23, 22 km W of Ingeniero Jacobacci	25 de Mayo	41°21' S, 69°48' W	942
74	National Road 23, 44 km W Ingeniero Jacobacci, 10 km E Clemente Onelli	25 de Mayo	41°16' S, 69°58' W	1084
75	Provincial Road 6, 17.4 km NE Ojos de Agua, 28 km S Ingeniero Jacobacci	25 de Mayo	41°26' S, 69°46' W	989
75	Provincial Road 6, 2.2 km NE Ojos de Agua	Ñorquinco	41°32' S, 69°51' W	1108
75	Provincial Road 6, 1 km NW Ojos de Agua	Ñorquinco	41°32' S, 69°51' W	1144
75	Provincial Road 6, Ojos de Agua	Ñorquinco	41°33' S, 69°52' W	1191
76	Provincial Road 6, 7 km NE Mamuel Choique	Ñorquinco	41°42' S, 70°07' W	1013
77	Río Chico	Ñorquinco	41°42' S, 70°29' W	903
77	Provincial Road 6, 7.4 km W entrance to Río Chico	Ñorquinco	41°45' S, 70°29' W	891
77	Provincial Road 6, 10.2 km W entrance to Río Chico	Ñorquinco	41°45' S, 70°31' W	990
77	Provincial Road 6, 40 km N Ñorquinco	Ñorquinco	41°46' S, 70°37' W	1018
77	Provincial Road 6, 31 km N Ñorquinco	Ñorquinco	41°46' S, 70°37' W	1018
78	National Road 40, km 1329, 23 km N El Maitén	Ñorquinco	41°53' S, 70°59' W	500
79	Along Rimrock, 4 km S and 1 km E Alto del Escorial	Ñorquinco	41°34' S, 70°45' W	1150
79	Ruta Nacional 1s40, 6.2 km N empalme Ruta Provincial 6, cerca de entrada a Estancia Fitalacao	Ñorquinco	41°45' S, 70°48' W	1080
79	Ruta Nacional 1s40, 9.8 km N empalme Ruta Provincial 6	Ñorquinco	41°43' S, 70°48' W	1203
79	Arroyo Las Bayas	Ñorquinco	41°27' S, 70°40' W	900
79	National Road 1s40, 2.5 km N Chenqueniye	Ñorquinco	41°33' S, 70°40' W	
80	Chenqueniye River, 10 km E, 3 km S Pico Quemado Hill	Ñorquinco	41°31' S, 71°00' W	1150
81	National Road 1s40, 23 km NW Las Bayas	Pilcaniyeu	41°15' S, 70°40' W	950
82	Provincial Road 23, 9 km E, 5 km S Estacion Perito Moreno	Pilcaniyeu	41°07' S, 70°54' W	1053

APPENDIX 2. CONTINUED.

MARKED POINTS	COLLECTION SITES	DEPARTAMENT	COORDINATES	ELEVATION
82	Estacion Perito Moreno	Pilcaniyeu	41°04' S, 70°58' W	976
83	National Road 1s40, 17 km NE Pilcaniyeu, Experimental Station INTA	Pilcaniyeu	41°01' S, 70°28' W	1197
83	National Road 1s40, 15 km S Pilcaniyeu Viejo	Pilcaniyeu	41°04' S, 70°32' W	900
83	National Road 1s40, Cañadón Bonito, 23 km NE Pilcaniyeu	Pilcaniyeu	40°58' S, 70°25' W	1135
84	National Road 40, 20 km S Cerro Alto	Pilcaniyeu	40°46' S, 70°34' W	1203
84	National Road 40, 2.7 km S San Pedro Farm	Pilcaniyeu	40°52' S, 70°34' W	1096
85	National Road 40, Cerro Alto, 54 km NW Pilcaniyeu	Pilcaniyeu	40°44' S, 70°34' W	1014
86	National Road 40, 15 km S entrance to Alicura	Pilcaniyeu	40°40' S, 70°42' W	734
87	Provincial Road 23, 2.3 km SE Comallo	Pilcaniyeu	41°01' S, 70°14' W	786
87	Provincial Road l 23, 4.8 km SE Comallo	Pilcaniyeu	41°02' S, 70°12' W	808
88	Provincial Road 67, 3.5 km N Cañadon Chileno	Pilcaniyeu	40°51' S, 69°58' W	1265
88	Provincial Road 67, 2 km N Cañadon Chileno, 37 km NE Comallo	Pilcaniyeu	40°52' S, 70°01' W	1230
89	Provincial Road 67, 20 km S Mencue	El Cuy	40°34' S, 69°44' W	1247
90	Provincial Road 67, 19.2 km NE Mencue	El Cuy	40°19' S, 69°26' W	1094
90	Provincial Road 67, 37.9 km SW junction Provincial Road 6 and Provincial Road 74	El Cuy	40°18' S, 69°22' W	1148
91	La Fragua Stream	Pilcaniyeu	41°05' S, 70°57' W	950
91	Junction between La Fragua Stream and National Road 23	Pilcaniyeu	Unknown	Unknown
92	Minor road, S Bernal Hill	Pilcaniyeu	41°17' S, 71°04' W	1150
92	Minor road, N Bernal Hill	Pilcaniyeu	41°12' S, 71°07' W	1100
92	Provincial Road 80, 2 km Seccional Ñirihuau, SE Ñirihuau River	Bariloche	41°18' S, 71°15' W	1150
92	Minor road,3 km E Blanco Hill	Bariloche	41°15' S, 71°17' W	1700
92	Minor road, 8 km S Bariloche, Valle del Challhuaco	Bariloche	41°15' S, 71°16' W	1500
92	Bariloche	Bariloche	41°09' S, 71°18' W	938
92	Cerro Otto	Bariloche	41°08' S, 71°22' W	1400
92	Lodging Trail Don Servando Woodmill, Río Manso	Bariloche	Unknown	Unknown
92	Provincial Road 81, Pampa Linda, Manso Superior River, Tronador Hill	Bariloche	41°14' S, 71°46' W	Unknown
92	Pampa Linda	Bariloche	41°14' S, 71°46' W	Unknown
93	Llao Llao Peninsula	Bariloche	Unknown	Unknown
93	Tunquelen Hotel, 25 km W Bariloche	Bariloche	41°07' S, 71°35' W	903
93	Catedral Hill	Bariloche	41°13' S, 71°30' W	1750
94	Minor road, 0.3 km Puerto Blest	Bariloche	41°01' S, 71°52' W	671
95	Mascardi Lake	Bariloche	41°21' S, 71°31' W	852
95	Minor road, E edge Lago Steffen	Bariloche	41°28' S, 71°34' W	500
96	Castaño Overo River, 44 km S Bariloche	Bariloche	41°38' S, 71°47' W	967
97	El Bolson	Bariloche	41°58' S, 71°31' W	379
98	Bajo Rico, minor road between Provincial Road 4 and Provincial 62, 22 km W Provincial Road 4	Valcheta	40°11' S, 66°16' W	181
99	10.5 km NE Bajo Rico	Valcheta	40°07' S, 66°25' W	152
100	Provincial Road 71, 41.7 km SW junction Provincial Road 6	El Cuy	39°39' S, 68°24' W	617
101	Provincial Road 74, 34.3 km N junction Provincial Road 71	El Cuy	39°24' S, 68°27' W	848
102	Provincial Road 7, El Anfiteatro, 49.1 km N junction Provincial Road 71	El Cuy	39°17' S, 68°27' W	637
103	Provincial Road 74, 20 km SW Aguada Guzmán	El Cuy	40°07' S, 68°56' W	935
104	Provincial Road 74, Chasico, 4 km N junction between Provincial Road 6 and Provincial Road 67	El Cuy	40°17' S, 68°58' W	988
104	Ruta Provincial 74, 33.2 km N Chasico (road to Aguada Guzman), 33.2 km N junction Ruta Provincial 6	El Cuy	40°02' S, 68°54' W	876
105	Piltriquitron Hill, E of El Bolsón	Bariloche	41°57' S, 71°28' W	1200
106	Aguada del Toro, Somuncura Plateau	Valcheta	41°17' S, 66°28' W	840
107	National Road 251, 74.5 km S Río Colorado	Pichi Mahuida	39°43' S, 64°26' W	118
108	Minor road to Bajo Santa Rosa, between Provincial Road 62 and 63, 3 km SE Santa Rosa hamlet	Valcheta	39°58' S, 66°34' W	130
108	Minor road between Provincial Road 62 and Provincial Road 63, 74 km N Nahuel Niyeu	Valcheta	40°00' S, 66°32' W	158
108	Provincial Road 62, 4 km N Nahuel Niyeu	Valcheta	40°28' S, 66°32' W	170

APPENDIX 2. CONTINUED.

MARKED POINTS	COLLECTION SITES	DEPARTAMENT	COORDINATES	ELEVATION
108	Provincial Road 62, 50 km N Nahuel Niyeu	Valcheta		
109	Provincial Road 63, 11.3 km W junction minor road and ford	9 de Julio	39°54' S, 66°59' W	212
110	Minor road to 20 km W San Antonio Oeste	San Antonio	40°37' S, 65°10' W	100
110	Minor road to 52.4 km NW San Antonio Oeste, Bajo del Gualicho	San Antonio	40°28' S, 65°23' W	-4
111	National Road 3, Km 1220, 43 km N Sierra Grande	San Antonio	41°13' S, 65°22' W	196
112	Provincial Road 50, 75.4 km S Río Colorado, in route to Guardia Mitre	Pichi Mahuida	39°31' S, 63°47' W	100
113	Provincial Road 66, 9.4 km N junction Provincial Road 63, Mesa Hill	Avellaneda	39°47' S, 67°15' W	275
114	Provincial Road 63, 33.8 km SW Lamarque	Avellaneda	39°37' S, 65°53' W	174
114	Provincial Road 63, 37.3 km E junction Provincial Road 62, in route to Lamarque	Avellaneda	39°41' S, 66°06' W	233
115	Provincial Road 56, 24.5 km junction National Road 22, 29.5 km NE Choele Choel	Avellaneda	39°05' S, 65°28' W	199
116	National Road 151, 10 km S Catriel	Gral. Roca	37°57' S, 67°53' W	302
116	20 km South of Catriel, National Route 151	Gral. Roca	38°0' S, 67°55' W	Unknown
117	Road to Rincón de Los Sauces, to 19.5 km W Peñas Blancas	Gral. Roca	37°37' S, 68°04' W	424
118	Minor road, 1 km N Aguada de Guerra	25 de Mayo	41°03' S, 68°22' W	896
119	Provincial Road 66, 27.7 km N Ministro Ramos Mexía	9 de Julio	40°16' S, 67°16' W	432
119	Provincial Road 66, 32.8 km N Ministro Ramos Mexía	9 de Julio	40°14' S, 67°15' W	394
120	Outcrops near Chasicó , south of El Cuy Plateau	El Cuy	40° 23' S, 69° 00' W	1150
121	50 km S de Catriel, National Route 151	Gral. Roca	38°21' S, 68°01' W	Unknown
122	Road between Cona Niyeu and Telsen, 8.4 km S junction Ruta Provincial 8	Valcheta	41°57' S, 66°48' W	645
123	National Road 23, 26 km west of Comallo	Pilcaniyeu	41°01' S, 70°32' W	950